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DESIGN
BULLETIN

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Children at play



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Abstract

Children at play is based on research carried out in 16 housing areas and discusses all the activities of young children (mostly under 11 years-of-age) near home. The bulletin gives guidance to designers and managers to plan for the play needs of children at the design stage of new housing schemes, and to improve play opportunities in existing areas.

The introduction stresses the importance of children's play and outlines the methods of research; this is followed by design recommendations, summing up the findings of the study. It concludes with a section giving suggestions for further research.

Chapter I discusses the pattern of play observed on 15 new estates with detailed descriptions of the type and costs of the play facilities provided. It includes the views and problems of adults with, and without, children.

Chapter II considers the problems of providing for play needs in older areas and suggests ways and means by which these play needs can be met.

Chapter III reports interviews with children in two of the study areas and contrasts the play habits and preferences of children living in a new housing estate with those of children living in an older area ready for redevelopment.

Chapter IV discusses the advantages and implications of supervised play.

There are three *appendices*. The first lists the various forms and locations of play activities; the second gives a brief description of each of the observation areas; the third lists the different types of supervised play facilities which are available.

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The Housing Development Directorate

The Department's Housing Development Directorate is a team of architects, sociologists, quantity surveyors and administrators who work with other specialists as necessary.

It is concerned with all aspects of housing development, and seeks to promote higher standards and better value for money. In particular, by studying the activities and aspirations of people in relation to dwellings and by studying also the process of building, it contributes to policy and its execution, and seeks to improve the standard of design, components, services and equipment, and to pass on information to others. One of the ways of doing this is by publishing design bulletins.

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Children at play

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Introduction

The importance of play

1. A century or so ago the full importance of play was not appreciated and even for the children of the wealthier classes it was frowned upon as frivolous, unnecessary and a manifestation of idleness. But it is now widely accepted that children have a deep and urgent need for play.

2. One of the first people to bring about this change of heart was the educationist Froebel. It is nearly 150 years ago since he stated that 'Play is the highest expression of human development in childhood'.¹ He was convinced that play was essential to a child's full development. Since his teachings, there have been many theories of play which have been well documented^{2,3,4,5}, the most comprehensive of which was expounded by Piaget⁶. He saw play as part of the child's response to his environment – a crucial process in reaching conceptual proficiency and intellectual development. He focussed attention on the need to provide the right type of environment and situation at each stage of development so that a child's potential could be fully realised. What all theories of play hold in common is that the child is father of the man; that play is not an end in itself, but has a purpose; and that therefore the child's opportunity – or lack of opportunity – for play determines to some considerable extent the sort of adult that he will become.

3. Play is generally believed to be one of the principal ways in which a child learns how to give as well as take, and in so doing he learns how to adapt to adult society as he grows up. Between birth and maturity, the child comes to terms with the world around him, and comes to accept that he has to take his fellows into account. The extent to which a child successfully learns how to live in and not outside society depends on a wide range of factors. These include not only his genetic inheritance, the social and physical background of his family, educational facilities, and relationships with his parents, but also the opportunity for play.

4. The realisation that play is essential to development has slowly but surely permeated our educational system and cultural heritage. Pre-school play groups, nursery schools, educational toys, youth clubs, and school playgrounds have all come into being at different times, from a belief that the child is rather different from a miniature adult, and that at each stage of his development he needs and enjoys these provisions.

5. The child who has not had the opportunity to meet his fellows, take part in their games, or explore his environment is deprived and therefore at a disadvantage. So at the very least we should ensure that opportunities for play suitable for each stage of development are available as far as possible to all children.

Aims and scope of this bulletin

6. It is the aim of this bulletin to deal with the facilities, layout and building form of the immediate housing area which will ensure the best possible opportunities for play. In doing this, we have enveloped in the word play all the activities of young children near their homes. The bulletin is mainly concerned with

those under 11, as the research showed that older children spend less of their time near to their homes. Because the leisure needs of the over-11s are more sophisticated, it is unlikely that they can all be fulfilled within the immediate housing area, but only in the wider neighbourhood. Nor have we explored the play habits and requirements of children inside the home. They both clearly deserve further investigation.

7. This bulletin is therefore no more than an attempt to guide designers and managers to plan for the play needs of children at the design stage of new housing schemes. It also tries to provide practical guidance, and where possible, solutions for making good the deficiencies of play opportunities in existing housing areas, where space may be at a premium. Although the study was carried out almost entirely on estates of local authority housing the conclusions would seem to be generally applicable to all housing schemes whatever their tenure and wherever they are built.

8. Though the main emphasis of the bulletin is on attaining the best physical environment for play, we know that for many children their social environment is crucial. Therefore the chapter on play supervision discusses some of the social problems which reduce opportunities for play, and possible solutions.

The research

9. The evidence of where children played when they were out of doors, how many of them were outside, and what they were doing, has been based on over 50,000 observations of children's outdoor activities on 15 modern housing estates, one older area scheduled for redevelopment, one adventure playground, and on a recreation ground before, during and after a supervised play scheme came into operation. Design recommendations which follow from the conclusions of the research are on page 8. The observation method and characteristics of the areas in which observations took place are described in more detail in paragraphs 12–16. The observation data were subjected to tests of significance. Therefore throughout the text the word 'significant' refers to a statistically meaningful correlation.

10. On nearly all the estates on which observations were carried out and on a further 50 local authority estates surveyed subsequent to the play studies, housewives, both those with and those without children, were asked questions about problems associated with play and for their opinions of existing facilities. In addition, in Oldham and Paddington, interviews were carried out with a random sample of children between seven and 11 living on or near new estates. They talked about where they played, what they did with their spare time and their play preferences.

11. All the estates where observations took place were subjected to detailed cost analyses by the Department of the Environment's quantity surveyors. This has enabled the relative popularity of various play areas to be related to their overall cost.[†]

[†]The quantity surveyors' estimates included the cost of: construction; play equipment; seats, litter bins and lighting; surrounding walls, fencing and balustrading; planting; paving; grassing and turfing; drainage and general excavation.

1 Estate characteristics (photographs appear on pages 4-7)

Estate	Date completed	Number of dwellings	Bed-spaces per acre	Building forms
<i>Low rise</i>				
GLOUCESTER STREET, Sheffield	1964	39	80	27 2-storey houses, 12 patio houses
WOODHOUSE, Sheffield	1964	162	70	2-storey houses
WOODWAY LANE, Coventry	1965	132	75	2-storey houses, old people's bungalows
FLEURY ROAD, Sheffield	1962	148	51	2-storey houses
<i>Medium rise</i>				
ST MARY'S, Oldham	1967	520	110	182 2-storey houses, 3, 4 and 5-storey deck-access blocks
THE BONAMY, Southwark, London	1966	342	173	3 and 4-storey balcony and deck-access blocks (39% flats, 61% maisonettes)
CURNOCK STREET, Camden, London	1966	283	161	4-storey balcony-access blocks - maisonettes, 1 6-storey block - flats, 9 3-storey houses
ROYAL COLLEGE STREET, Camden, London	1967	317	145	4 and 5-storey balcony-access blocks
EDITH AVENUE, Washington, Durham	1968	673	135	3, 4 and 5-storey deck-access blocks (50% flats, 50% maisonettes)
ACORN PLACE, Southwark, London	1963	534	136	7-storey balcony-access block, 2 and 3-storey houses, staircase access flats at second floor level over maisonettes
<i>Mixed rise</i>				
PARK HILL, Sheffield	1961	995	200	4 to 14-storey linked deck-access blocks
SCEAUX GARDENS, Southwark, London	1960	403	136	2 16-storey internal corridor slab blocks - maisonettes, 6-storey balcony-access slab blocks - flats and maisonettes, terraces of bungalows
CANADA, Southwark, London	1964	253	161	2 21-storey point blocks, 5 3 and 4-storey balcony-access cluster blocks, flats and maisonettes
WINSTANLEY ROAD, Wandsworth, London	1966	530	154	1 22-storey internal corridor slab block, 3 11-storey point blocks, 4 and 5-storey linked balcony-access slab blocks
WARWICK, Westminster, London	1962	1,099	137	21 and 22-storey tower blocks, 3, 4 and 5-storey maisonette blocks, renovated Victorian terrace houses

mothers satisfied with estate	Play facilities	% mothers satisfied with estate
%	None	89%
%	None	64%
%	6 areas with brick structures	97%
%	1 unequipped area	98%
%	1 area with moving, static conventional, architectural equipment and paddling pool. 1 area with swings. 4 areas concrete structures	87%
%	1 area, conventional static equipment, empty sand-pit	54%
%	4 areas each with moving and conventional static equipment and concrete structures	74%
%	None	77%
%	3 ball-games areas, 6 sand-pits. 3 empty paddling pools	62%
%	1 ball-games area, 2 conventional areas with static and moving equipment	38%
%	3 equipped areas with conventional static equipment and concrete structures, each with sand-pit, 2 ball-games areas, bowling alley	72%
%	1 climbing frame	54%
%	3 areas each with concrete structures. Park adjacent to estate with conventional moving and static equipment, and ball-games area	40%
%	1 area moving and static conventional equipment. 6 areas static and concrete structures. 1 ball-games area	80%
wn	8 areas with static or concrete structures. Adventure playground (run by voluntary organisation) with hut for indoor activities	not known

Observation method

12. In order to study the outdoor activities and locations of children at play, an observation sampling method was employed similar to the one used in earlier play studies by the Building Research Station^{7,8} (now part of the Building Research Establishment). This consisted of observers making set walkrounds, devised so that every part of the area being studied came under surveillance. The rounds were made at fixed intervals during the day, the observer noting on specially devised schedules all children seen during a round, their sex and estimated age and what they were doing. The position of each child was recorded on a site plan and a record of the weather conditions was kept. On some of the estates, additional information was collected about the size and composition of groups of children, and the number of children accompanied by adults. The observer also noted what the children were doing. An attempt was made to categorise these activities in some detail but it soon became apparent that to interpret accurately the full range of play activities was impossible. The broadest of categories were therefore adopted. These, with the location codings, are shown in Appendix I.

13. The observations were carried out generally for 12 hours a day during the summer school holidays when outdoor play is assumed to be at its peak. Each estate was observed for four days – two weekdays, a Saturday and a Sunday.

Characteristics of observation areas

14. The 15 housing estates on which observations took place were local authority estates in Coventry, London, Oldham, Sheffield and Washington New Town, built since 1960. They are described in detail in Appendix II. All except four were in the central areas of these towns surrounded by busy streets and built-up areas with few open spaces nearby. The four exceptions, Fleury Road and Woodhouse in Sheffield, Woodway Lane in Coventry and Edith Avenue in Washington New Town, were situated on the outskirts and near open country; in fact Woodway Lane and Woodhouse had fields actually adjoining the estates. Warwick, in Paddington, had an adventure playground which was included in the observation area.

15. All the estates were selected to give a comprehensive range of building forms at a variety of densities (Figure 1).* They varied in size from 39 to 1,099 dwellings and in density from 51 to 200 bedspaces per acre. Schemes of houses below 70 bspa have been defined as low-density, schemes between 70 and 120 bspa as medium-density, and schemes built at more than 120 bspa as high-density. The low-rise estates consisted of two-storey houses and bungalows. The medium-rise estates contained houses, flats and maisonettes up to five storeys high.† The mixed-rise estates were a mixture of storey heights and all had at least one block over 13-storeys high.

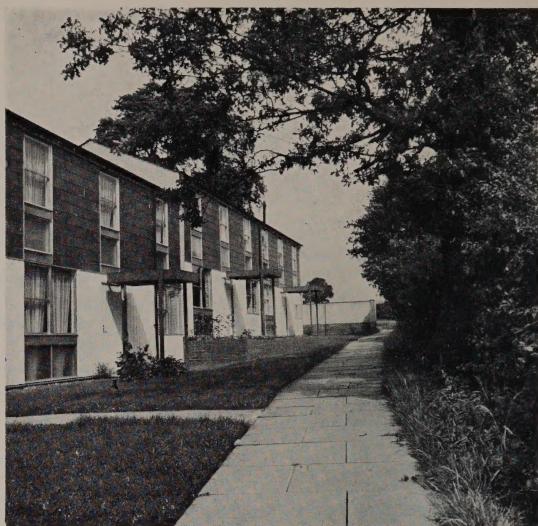
16. The other housing area in which observations took place was in Oldham adjoining the St Mary's Estate, and was scheduled for redevelopment. The remaining observation area was the Emslie Horniman Pleasance Recreation Ground in Kensal Town.

*For ease of reference extracts from Figure 1 are provided in the form of a throw-clear following page 110.

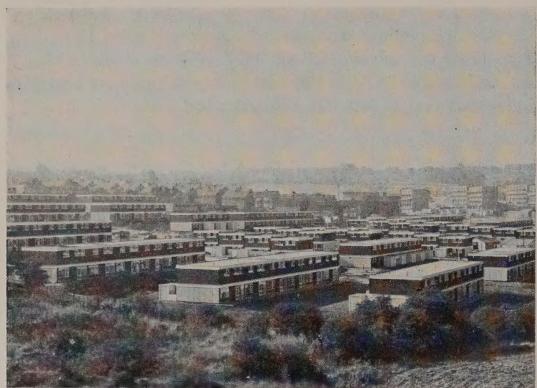
†The only exceptions were Curnock Street, which had one six-storey block of flats and Acorn Place, which had one seven-storey block of flats and maisonettes. As no children lived above the fifth floors and as they were similar in other respects to medium-rise estates, they were included in the medium-rise category.



2 GLOUCESTER STREET, Sheffield



4 WOODWAY LANE, Coventry



3 WOODHOUSE, Sheffield



5 FLEURY ROAD, Sheffield



6 ST MARY's, Oldham



9 ROYAL COLLEGE STREET, Camden, London



7 THE BONAMY, Southwark, London



10 EDITH AVENUE, Washington, Durham



8 CURNOCK STREET, Camden, London



11 ACORN PLACE, Southwark, London



12 PARK HILL, Sheffield



13 SCEAUX GARDENS, Southwark, London



14 CANADA ESTATE, Southwark, London



15 WINSTANLEY ROAD, Wandsworth, London



17 THE OLDER AREA, Oldham



18 THE EMLIE HORNIMAN PLEASANCE RECREATION GROUND, Kensington and Chelsea, London



16 WARWICK ESTATE, Westminster, London

Design recommendations

Dwellings for families with young children

17. Wherever possible families with young children should be allocated houses. If density or other design factors make this impossible, only the dwellings on the ground or first floor of a multi-storey building should be considered. It was found that the under-11s played outside more if they lived in dwellings with ground or first-floor access, and it was clear that if they lived in houses mothers found their children's play less of a problem. This may mean at high densities that households without children will have to be housed off the ground or first floor. However, they are the people least adversely affected by this solution, and in many cases prefer the privacy, views and quiet it gives them.

Play areas

18. The number of children who used play areas was significantly influenced by the amount of play space per child and by the type of equipment available. Play areas on housing estates should therefore conform to the standards recently laid down in one of the Department's circulars.⁹ On all schemes containing ten or more bedspaces, play space should be provided on the basis of 3m² (32.3 sq ft) per child bedspace. (The number of child bedspaces in a scheme is calculated by subtracting from the total number of bedspaces in the scheme all the bedspaces in old people's dwellings, all bedspaces in one and two-person dwellings, and two bedspaces in family dwellings.) Play space should also be equipped from the list in Appendix I of the circular; this equipment was selected because it was well-used and liked by children. This does not prevent a council from providing extra, different, pieces of equipment, in addition to those on the list, if it considers this appropriate.

19. The standards require play space to be provided at all densities. In those high-density schemes where children have to live off the ground and therefore play outdoors less, it is hoped that play space will attract them outside. At low densities, where children play more on roads and pavements than in gardens, well-equipped play areas can succeed in attracting them away from roads.

20. Neighbourhood play provision should not be regarded as a substitute for play space within housing areas.

21. Play areas should where practicable be sited close to family dwellings and away from dwellings designed for elderly and adult households.

22. Play areas are used by children of all ages, though they are less popular with the over-11s. Out of school hours young children are often informally supervised by older brothers and sisters, and so play areas may be used less if they are segregated by age groups.

23. Accidents may occur wherever children play; to minimise the possibility of them, however, play equipment should be checked regularly for wear, damage, and the need for replacement.

24. Play equipment should be cleaned and maintained like any other communal property on estates. Although sand-pits and paddling pools are very popular with children, they should only be provided if daily attention is possible.

25. Play areas should be carefully landscaped and sheltered from extreme weather conditions and wind tunnels from high flats. Natural features and planting should be retained wherever possible and a variety of hardwearing surfaces considered.

Supervised play facilities

26. All authorities should consider whether they have made sufficient provision for supervised play, over and above the facilities for unsupervised outdoor play on housing estates. Supervision can extend the range of play activities, help to compensate physically and socially deprived children, and for some pre-school children provide opportunities for acquiring language and social skills. Supervision also makes possible the use of indoor accommodation, so necessary in this climate. Skilled play-leaders can enable the resources of built-up inner areas to be used to better and fuller effect by the children.

27. As wide a range as possible of all types of supervised play facilities should be considered not only by the educational and social services but by the housing managers, planners and designers. It is they who will make the decisions about the scale and type of community provision in the planning of new schemes and who can allocate for play purposes existing premises on housing estates to organizations, many of whom will be voluntary. Very often tenants' halls and clubs for old people can be used by young children.

The estate

28. By no means all of a child's time is spent in play areas, however well designed and equipped. Therefore the whole estate should be planned with the children's needs in mind. Attention should be given to each of the following areas:

(a) *Roads.* Roads and all spaces adjacent to them should be designed to reduce as many known hazards as possible. Children will play on or near roads if they are the areas nearest to home; they are significantly more popular for play than gardens.

(b) *Gardens.* Gardens attached to family dwellings should be adjacent to either the kitchen or the living area used during the day. They should also be as close as possible to the main comings and goings of the estate. Adequate fencing should be provided to prevent young children getting out. If this is done, gardens, though by no means the main place for play, should be more popular.

(c) *Paths.* Paths suitable for play should be sited away from old people's dwellings. Where the play is not likely to create a disturbance, paths can be linked to make tricycle-riding – and other play with wheeled toys – easier, perhaps by the use of ramps rather than steps.

(d) *Access areas.* If councils have to house children above the ground, the provision of wide, well-balustraded access decks will go some way towards overcoming the disadvantages. Dwellings for families with children and for childless households should not be situated on the same decks, so that childless households are not disturbed by children's noise.

(e) *Grassed areas.* Where they are intended for children, they should be as large as possible, to reduce intensity of use. Several points of access will also help to avoid excessive wear and tear. If grassed areas are largely decorative then they should be carefully landscaped to discourage children's play.

(f) *Planted areas.* Similarly, planted areas which are part of the landscaping need protecting from children. They are less likely to be used for incidental play if they are raised above the path level and contain prickly plants. Planted areas require regular care if the plants and shrubs are to flourish, and need to be renewed when necessary.

(g) *Walls, railings, garage roofs, trees etc.* These should all be either strong enough to withstand a certain amount of use by children, or protected.

(h) *Open country.* In planning children's play needs, open country, unless an integral part of the estate, should not be taken into account.

Play in older areas

29. The most urgent need is to create spaces for play where none exists, and to make better use of existing space. Clearing waste and derelict land, and making better use of school premises, parks and recreation grounds, are some of the ways of achieving this.

30. As so much of children's play is spontaneous, and takes place near to home, improvements for play should be looked at street by street.

Suggestions for further research

31. Less than one in ten of the under-11s were seen with adults. As so many of the children played on or near roads, we need to know far more about why so few adults accompanied them, even in situations which the parents themselves would admit were subject to traffic dangers. With this knowledge it would be easier to know how to make parents more aware of the physical limitations of young children's capabilities to deal with traffic hazards.

32. Although mothers considered their children's play needs to be less of a problem when they lived in houses, over half of those were still worried about this question. The provision of play facilities and safety from traffic did little to alleviate these worries. It could be that mothers were reflecting more than play problems in their answers, that is, more general difficulties of bringing up young children. Far more should be done to probe these difficulties.

33. Although the recommended play equipment has been used throughout the country for many years, accidents do occur while the children are using it. Research is needed to investigate causes and possible solutions.

34. The following suggestions relate to supervised play:

(a) though the importance of supervised play has been recognised, little design research has been done on the indoor accommodation most appropriate to different types and ages of children, and the costs involved. We should try and get away from the view that any hut is good enough for children's play needs. Housing authorities, particularly, should consider the possibility of making tenants' halls and old people's clubs suitable for play;

(b) one of the major drawbacks to making supervised play facilities more widespread is the expense of staff salaries. There is some evidence to show that supervision can reduce vandalism. Further study should probe whether the cost of supervision is more than offset by a reduction in vandalism;

(c) more work needs to be done to find ways of improving the working conditions and staff ratios of playleaders. This should encourage them to stay longer which will give the children a feeling of continuity.

Chapter I

Play on fifteen
local authority
housing estates

1 The children outdoors

35. Never more than a fifth of the resident children were seen outdoors on the average observation walkround,* but this proportion varied from one age group to another. Approximately 17% of the under-fives, 30% of the five-to-tens and 13% of the over-tens were seen outside. It is perhaps not surprising that the five-to-tens were the age group most frequently observed. Though still too young for most of them to be allowed to wander far from home (and therefore beyond the scope of the observations) they were old enough for most parents to let them play near their own homes, especially with friends. Three-quarters were seen in groups and the majority of these were groups with at least one five-to-ten in them.

36. It is perhaps equally to be expected that the children of secondary school age were the least often seen on the estates. At this age most children are allowed to come and go very much as they please, and few parents feel it necessary to keep them continually in sight. It is unlikely that the average housing estate can provide a sufficient range of facilities to meet all their needs. Certainly the ball-games areas were little used. Two ball-games areas at Park Hill, including a large area of 12,740 sq ft, attracted in all no more than a tenth of the observed boys over ten, and this was considerably more than on any other estate or for any other age group of either sex. Even the existence of an adventure playground on Warwick Estate did not increase the numbers of older children seen out. In fact a census taken at the playground for two days during the summer holidays of 1969 showed that of the 186 children using the playground only a quarter were between 11 and 15.

37. However, for the under-11s,† it seemed that the physical characteristics of the housing areas studied *did* affect the extent they played outdoors.‡ A higher proportion of under-11s were observed outdoors on the medium and low-density estates than on the high-density ones (Figure 19), and more were out on the low-rise estates than on either the mixed or medium-rise ones (Figure 20). Once the estates of houses were excluded from the analysis, the numbers seen out were not affected simply by either the size, or rise or density of the estates but only by the proportion of under-11s living on the ground or very close to it. It is

*This was calculated by taking the number of children seen out during each walkround as a percentage of the resident child population. This method is by no means foolproof and the results should be interpreted with caution. It is for this reason that detailed age breakdowns have not been attempted.

†It is regrettable that it was not possible to separate the pre-school children from the five-to-tens as their needs are often different from those of school age. One can only hypothesize that, as pre-school children are even more likely to play near their homes than the older ones, the tendency for building form to affect the proportion of outdoor play would have been even more pronounced with a larger sample of pre-school children.

‡We were not able to correlate the social characteristics of the children or their families with the extent to which they were seen outdoors. The subsequent discussion of significant relationships should therefore be interpreted with caution as there may have been influential social factors which were not distributed randomly throughout all of the estates.

19 Percentage of resident children seen outdoors; by density of estate

Age	0-10 years	%	No.
Medium & low density	30	6,990	
High density	24	32,127	
Total	25	39,117	
Age 11-15 years			
Medium & low density	12	729	
High density	14	7,349	
Total	13	8,078	
All children			
Medium & low density	26	7,719	
High density	21	39,476	
Total	22	47,195	

20 Percentage of resident children seen outdoors; by 'rise' of estate

Age	0-10 years	%	No.
Low rise	30	6,990	
Medium rise	24	17,854	
Mixed rise	24	14,273	
Total	25	39,117	
Age 11-15 years			
Low rise	12	729	
Medium rise	12	3,351	
Mixed rise	15	3,998	
Total	13	8,078	
All children			
Low rise	26	7,719	
Medium rise	21	21,205	
Mixed rise	21	18,271	
Total	22	47,195	

highly likely, therefore, that the most important contributing factor to the extent children played outdoors was whether they lived in a dwelling with ground-floor access. Ready and easy access to the outdoors was clearly important. On multi-storey estates where a high proportion of children lived in ground-floor or first-floor flats, more of them played out than where they lived further from the ground. Moreover, there was no significant difference between the numbers of under-11s seen out on the estates of houses and on estates where a high proportion lived in ground or first-floor flats.

38. There would therefore seem to be no intrinsic superiority* in houses over any other ground or first-floor dwelling in the effect they have on the extent children play outside. Even though more of the houses had gardens, these could not have been the prime reason for allowing the children out, as children spent less than a fifth of their time in gardens (paragraphs 64-67). For mother and child to be in sight and sound of each other is probably what counts, whether the outdoor spaces are private or communal. From our evidence it appeared that once the child lived off the ground or above the first floor, increasing height above the ground was immaterial to the extent he played out. Thus the mother living on the second or third floor was no more likely to let her child out to play than the one living on the tenth or twentieth floor.

39. The only other research which throws further light on this question has been carried out in Denmark¹⁰ and Sweden¹¹ and reveals broadly similar findings although the methodology was slightly different. The main difference was that it included second-floor dwellings in the definition of 'near to the ground' and these made a significant difference to the extent young children played outside. This research also showed that the children who lived near to the ground were more likely to play out alone, came out to play a greater number of times, and stayed out for longer each time, than those who lived on the higher floors. It would seem that proximity to the ground means that the mother and young child are less likely to treat the outside as a special outing but rather as part and parcel of normal home life and a continuation of the home environment.

40. The patterns of play where children lived in multi-storey blocks with wide access decks were similar to those found at ground and first-floor level. At Park Hill, for instance, a similar proportion of under-11s were seen out as at Woodway Lane, an estate of houses, and half of these played in access areas irrespective of the height above the ground. Apart from Edith Avenue, where two-thirds of the young children lived on or near the ground, Park Hill was the only estate studied where *all* the above-ground dwellings were served by a wide deck. It is therefore impossible to say whether the Park Hill pattern is generally applicable. Certainly it would seem that the type of access is one of the important factors affecting the extent children play out. Judged solely on this criterion, a Park Hill type of solution would seem preferable to point blocks, or blocks with narrow access balconies or internal access arrangements.

41. Wherever possible then families with young children should be housed no higher than the first floor and preferably at ground level. The children's mothers are at any rate more contented if they do not have to cope with prams, children and shopping baskets in lifts or upstairs.¹² Families with young children dislike using stairs more than any other type of household.¹³

42. At low densities (under about 70 bspa) it is possible to provide all the family dwellings at ground level. At higher densities, however, designers and housing managers need to work closely together to ensure that many if not all the families with young children live at ground or first-floor level. Within our sample, density on its own was not the main determinant of how many children were housed on ground and first-floor levels (Figure 21). At Park Hill, with a very high density of 200 bspa, more children lived at these levels than on four other estates with lower densities. It is probably true to say that certain types of scheme made the task of allocation easier. In all the medium-rise schemes we studied, significantly more young children lived on the ground or first floor than in the mixed-rise high-density schemes (Figure 22). However, it is not only the type of scheme which determines how much freedom the housing manager has to allocate the right kind of dwelling to young families, but design decisions made at the drawing board stage about the distribution in the scheme of various dwelling types. At Royal College Street mainly small flats unsuitable for families were on the ground. At Sceaux Gardens old people were housed in bungalows, and most family dwellings were off the ground. It is also fairly common practice to utilise the ground floor in blocks of flats for stores, laundries and other common services.

21 Percentage of children aged 0-10 living on the ground and first floor on each estate

Estate	Density in bed- spaces per acre	Density in bed- spaces per %	No.
Fleury	51	100	74
Woodhouse	70	100	318
Woodway	75	100	232
St Mary's	110	90	249
Edith	135	66	458
Acorn	136	78	345
Sceaux	136	22	138
Warwick	137	33	500
Royal College	145	51	175
Winstanley	154	18	402
Canada	161	23	235
Cumnock	161	55	175
The Bonamy	173	54	273
Park Hill	200	31	407

*Here we are only discussing the houses in respect of the influence they had on the extent children played out. This is not to say that the merits or otherwise of certain types of dwelling may not appear in quite a different light when related to other issues.

22 Percentage of children aged 0–10 living on the ground and first floor on medium and mixed-rise estates

Medium-rise estates	%	No.
St Mary's	90	249
Acorn	78	345
Edith	66	458
Curnock	55	175
The Bonamy	54	273
Royal College	51	175

Mixed-rise estates	%	No.
Warwick	33	500
Park Hill	31	407
Canada	23	235
Sceaux	22	138
Winstanley	18	402

43. Here it should be recognised that adult and elderly households do not share the other families' needs to be on or near the ground. Research has shown that most childless households are not only happy to live off the ground, but in certain circumstances actually prefer it.^{13,14,15,16} Thus at high densities opting for a solution where *all* old people are housed on the ground may result in pleasing no one: it may fail to give them reasonable privacy, views and quiet; reduce the children's opportunities for ground-floor dwellings, and their ability to play without incurring the displeasure of neighbours. At higher densities, many childless households may be better off in schemes without families, or in multi-storey dwellings. At Curnock Street, for example, all the small dwellings occupied by adult and mainly elderly households were in one six-storey block. The people living there were well pleased with their accommodation and with the estate.¹⁶ Over half of the young children on that estate lived at ground level even though the density was 161 bspa.

44. The question remains, however, whether outdoor play is sufficiently important to warrant strong recommendation that designers and planners should aim at producing schemes at densities and in design terms that do not inhibit it. It is widely held to be so.¹⁷

45. When the Newsoms wrote 'the average four-year-old in England today is healthy and well-nourished; in consequence he has an abundance of physical energy'¹⁸, they were describing a condition characteristic of most young children. The healthy unrepressed child has tremendous physical energy which cannot find sufficient outlet indoors. To expend this energy is an essential part of growing up. The child needs outdoor space to develop basic physical skills, such as running, jumping, balancing; and also to meet his friends. 'The degree to which he (the child) learns to direct his own body and co-ordinate his movements is partly dependent upon the kinds of stimulation which his environment provides'.¹⁸

46. In an ideal world mothers would have the time and inclination to see that these demands were met irrespective of their physical surroundings. One might imagine, for instance, that if they were in any way worried about their young children playing outside they would accompany them. In our study no more than a third of the under-fives were seen with adults and it was usually considerably less (Figure 23). One alternative to allowing children out with adults is letting them play with older siblings and friends. Half the pre-school children observed were with children from older age groups. Many mothers either have other children to consider, or work part or all of the time, or simply do not appreciate the value of outdoor play. For them, the only alternative to allowing the child out alone or with other young children, which many will understandably be reluctant to do, will be to keep the child indoors. But this, as we have seen, imposes limitations on physical activities and social interactions.

23 Percentage of children aged 0–4 seen with adults

Estate	%	No.
Edith	30	1,042
Warwick	19	565
Royal College	18	351
The Bonamy	15	526
Curnock	15	610
Fleury	7	217
Winstanley	6	919
Acorn	5	677
Canada	5	551
Park Hill	4	962
Sceaux	3	319

Note — At Gloucester Street, Woodhouse, Woodway Lane and St Mary's, observations were not taken of adults accompanying children.

2 Where the children played

47. Most outside play took place near dwellings. Irrespective of density and building form, at least three-quarters of the children, whatever their age, but particularly the under-fives, were observed playing near to home. The differences found in where children played were caused by the types of spaces available adjacent to dwellings at the different densities and building forms. Though we do not know for certain whether children were playing near their own homes, it seems likely that this was so. Not only do mothers like to keep an eye on what they are doing, but the children themselves prefer to play in the orbit of their mothers. This tendency for children to play in the direct vicinity of the dwelling – 'doorstep play' – in spite of suitable alternative places, has been confirmed by other studies, not only in this country^{7,8} but in Denmark¹⁰, Sweden¹¹ and Holland¹⁹.

Doorstep play

Most outside play took place near to home



24 CANADA



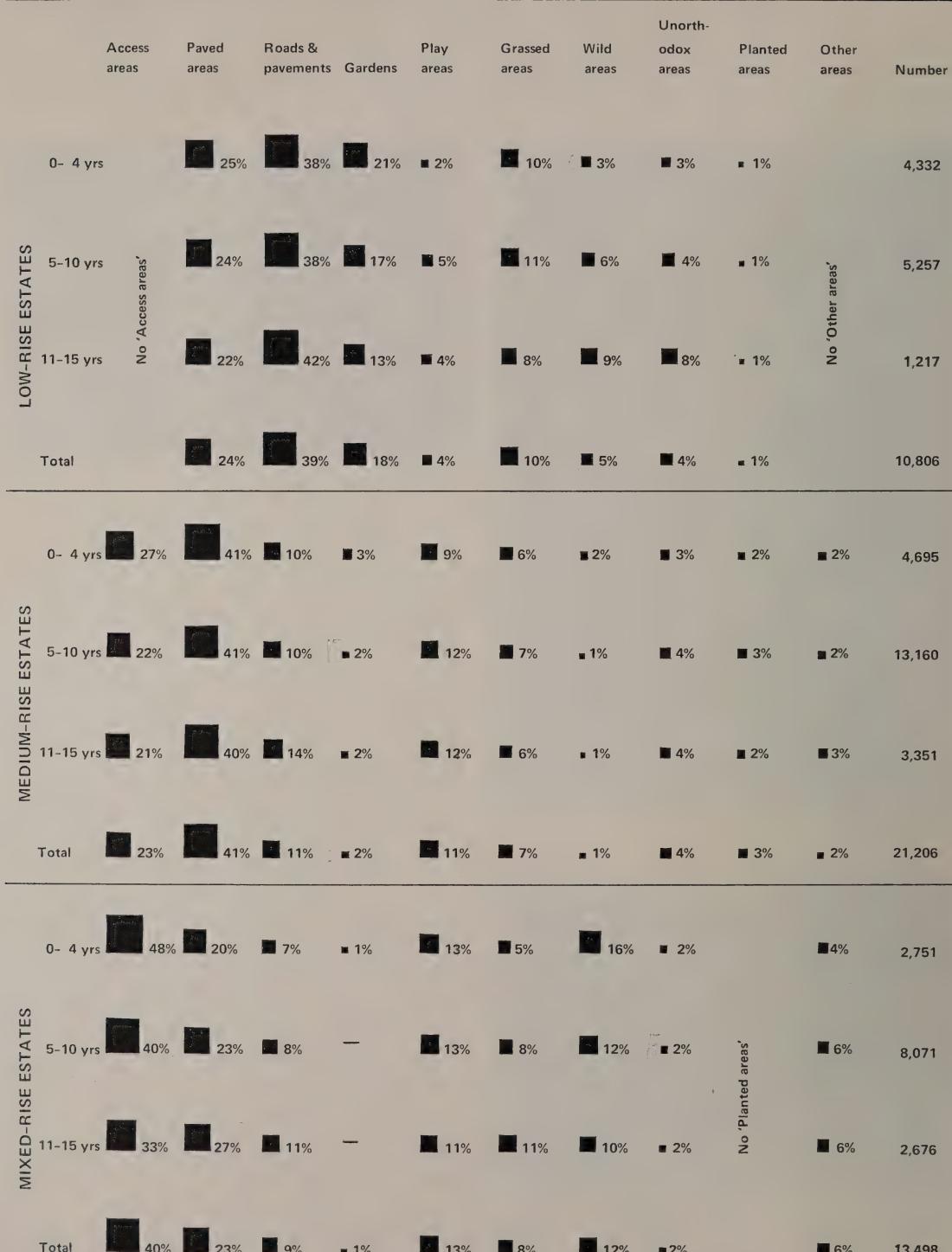
25 ST MARY'S



27 PARK HILL – access deck



26 ACORN PLACE



These percentages were adjusted to exclude the numbers of children observed on the estates which did not have locations in a particular category. Therefore totals exceed 100%.

Roads and pavements

48. On the estates of houses, two-fifths of the children were seen at play on roads (including garage courts) or adjoining pavements,* and this was significantly more than played in gardens, play areas or paved areas (Figure 28).

49. This was because children mainly play near to their homes as discussed above. On the more conventional estates of houses, home is more likely to be near roads and pavements than on the mixed or medium-rise estates. On these latter estates of mainly flats and maisonettes, roads tend to be segregated from dwellings and there is a choice of other hard-surfaced spaces such as paved or access areas closer to the dwellings. Fleury Road was the only low-rise estate that did not fit into this pattern; just under a fifth of the observed play took place on or near roads, the reason being that roads were located away from dwellings, thus making paved areas adjacent to the dwellings the most popular play location.

50. The finding that so many children played on or near roads cannot be ignored. An average of less than a tenth of the under-11s were seen with adults, even though on most of the estates where we interviewed mothers about this almost half of them considered their children to be safe from traffic. Indeed a survey carried out by the Office of Population Censuses and Surveys for the former Road Research Laboratory²⁰ showed that 26% (averaged) of the two-year-olds in their sample, and 77% of the five-year-olds, were considered by their mothers to be able to cross the road outside their homes by themselves.

51. In 1971, 37,926 child pedestrians under 15 were killed or injured on the roads† and it was established that pedestrians

under 15 were three times as likely to suffer from a road accident as adults over 15 and under 60. The child's physiological limitations for coping with traffic are only just becoming realised. A Swedish child psychologist²¹ has shown that, because of the immaturity before the eleventh or twelfth year of various important mechanisms, such as sight, hearing and the ability to differentiate right from left, fast and slow, near and far, children are especially vulnerable in traffic situations. For such reasons, the Danish and Swedish Building Institutes recommend traffic-segregated layouts.

52. In this country too, a study in Stevenage²² has shown traffic-segregated layouts to have 'positive advantages ... in terms of safety for children', and the differences in accidents between two neighbourhood units, one traffic-segregated and one not, were statistically significant.

Play on roads and pavements

These locations were popular on estates where dwellings were near to them



29 WOODHOUSE



30 ST MARY'S



31 GLOUCESTER STREET

*We did not separate out the observations for roads and their adjacent pavements as we considered that there was a potential traffic danger from playing near the roads. At the pilot stage it became obvious that many activities took place on roads and pavements concurrently (Figure 31).

†The Transport and Road Research Laboratory which collects national accident statistics does not divide the type of road beyond category c, which covers most roads in housing developments whether they are segregated or not.

53. Some would argue that children will only learn to cope with traffic if they are introduced to it at an early age and that a segregated layout does not give them this opportunity. There is also the question of whether the traffic which is diverted away from one particular area is building up and creating traffic hazards in another. An interesting study carried out by the Building Research Station on the location of primary schools in St Albans and Stevenage²³ showed that an accident to a child on a major road was more than twice as likely to be serious in Stevenage than St Albans. One reason put forward was that, because of the segregated areas in Stevenage, traffic was firmly channelled into distributor roads and built up speed, whereas at St Albans residential roads could be used as short cuts, thereby cutting down the traffic flow on the major roads.

54. Until research, at present being undertaken by the Department, can demonstrate more conclusively the effect of segregation on accidents one can only suggest that designers and traffic engineers opt for a compromise solution. This would recognise that where roads are near to dwellings they will be used extensively for play even where gardens and safe play areas are provided. Attempts must be made to make roads as safe as possible for the children by reducing the hazards conducive to accidents, rather than by deciding that complete segregation is the answer at this moment. The Stevenage study²² showed that a new area which was not segregated from traffic had a lower accident rate

than an older non-traffic-segregated area, indicating that it is possible to decrease accidents in non-traffic-segregated areas with careful design.

Paved and access areas

55. Paved areas were a popular play location when situated close to the dwellings. Their popularity seemed to depend on the comparative accessibility and attraction of roads and access areas. On estates like Fleury Road, which were traffic-segregated and had no communal access areas, paved spaces were by far the most popular location, and two-fifths of all play activities took place on them (Figure 32). At Gloucester Street, Woodhouse and Woodway Lane less than a quarter of the children played on paving. Here the bustle and activities of the estates were centred more on the roads and garage courts than the pedestrian walkways. Children were therefore attracted away from the safer paved areas onto the roads and into garage courts which were large enough for many of the more popular activities (Figure 33).

56. On the mixed and medium-rise estates, paved areas were situated more conveniently to the dwellings than were the roads, as all these estates tended towards complete traffic segregation, and significantly more children played on them than on roads

32 Percentage of children observed in doorstep locations on each estate

ESTATES	Access areas %	Paved areas %	Roads & pavements %	Gardens %	Other areas [†] %	No.
LOW RISE						
Gloucester	*	21	47	18	14	3,087
Woodhouse	*	24	34	24	19	3,524
Woodway	*	23	43	13	21	3,215
Fleury	*	41	18	13	28	980
MEDIUM RISE						
St. Mary's	4	43	17	3	32	5,169
The Bonamy	27	42	10	*	21	3,163
Curnock	25	42	6	*	28	2,846
Royal College	42	36	18	*	4	1,435
Edith	31	41	5	*	23	4,861
Acorn	26	39	11	1	22	3,732
MIXED RISE						
Park Hill	48	16	4	*	33	4,424
Sceaux	29	40	8	0	24	1,732
Canada	31	26	10	1	33	3,780
Winstanley	46	22	14	0	18	3,562
Warwick	25	18	30	0	28	4,773

* No locations in this category on this estate.

† Play areas, grassed areas, wild areas, unorthodox areas, planted areas, other areas.



33 WOODWAY LANE

On the estates of houses many children played in the garage courts which were closer to the activity of the estate than the paved areas

Play on paved areas



34 WOODWAY LANE



35 ST MARY'S

(Figure 28). Warwick was an exception to this; though a mixed-rise estate it was not traffic-segregated and in its layout more like the low-rise estates of houses.

57. On the mixed and medium-rise estates paved and access areas were nearly always the two areas closest to the dwellings, and thus the two most popular places for play. On the mixed-rise estates a quarter of the play took place on paving and two-fifths in access areas. On the medium-rise estates this pattern was completely reversed and two-fifths of the play took place on paving and only a quarter in access areas. The most likely reason for this clear difference between the two types of estate is the differing proportions of children living at ground level. On the medium-rise estates, except for Royal College Street where the play patterns were similar to those on a mixed-rise estate, significantly more children lived at ground level than on the mixed-rise estates. More of them were able to make use of the paving at ground level for doorstep play. For the greater numbers of children living off the ground on the mixed-rise estates, the deck and access balconies fulfilled the same functions for doorstep play, particularly for the under-fives.

58. Paved areas were the most popular location for active pursuits, particularly for riding tricycles and wheeled toys. Though a path system has to be provided for access, with a little care and at little extra cost it can be an interesting and stimulating environment for children. While a series of unconnected paths and paved areas may meet the needs of adults, they are not so suitable for play unless they are connected together to form a linked system through which the child can circulate and use wheeled toys and ride tricycles (Figure 36). Preferably such a path system should be sited on the more active parts of the estate near shops, schools, play areas and dwellings where children live. Pathways with few outlets should be placed near the dwellings of elderly residents and other families without children, to reduce the possibilities of disturbance from the noise of children's play (Figure 37).

59. Steps often prevent children from using paths as freely as they may wish. The steps at Fleury Road led children to create their own cycle paths in the grassed slopes alongside the steps, which

resulted in worn grass (Figure 38). Ramps, which were used at Curnock Street and Gloucester Street, can help to overcome this problem (Figure 39). However, the use of steps may help to keep children away from old people's dwellings or any other part of the estate where quietness is required.

60. Part of the popularity of access areas, apart from the fact that they were close to dwellings and were focal areas for the comings and goings of the estate, may well have been that they provided a

Play on paved areas



36 WINSTANLEY ROAD
An interesting and well-used route suitable for bicycles and wheeled toys



37 WOODWAY LANE
The children's activities extended onto the paths outside the old people's dwellings

sheltered play environment. Their suitability and safety can perhaps be questioned and were largely dependent on the design and type of the access. Dark areas under stairs or by refuse chutes, and the internal landings and corridors lit by artificial lights, were very bleak and unsatisfactory play areas; other access areas were positively unsafe (Figures 42 and 43). In contrast, the wide decks at Park Hill (Figure 44), which were very popular, provided safe covered areas open to light and fresh air, where the children could play away from traffic and without hindering pedestrians.



38 FLEURY ROAD
Steps made bicycle riding down the paths difficult, resulting in worn grassed areas alongside



39 CURNOCK STREET
Ramps made the use of bicycles easier

Play in access areas



40 EDITH AVENUE



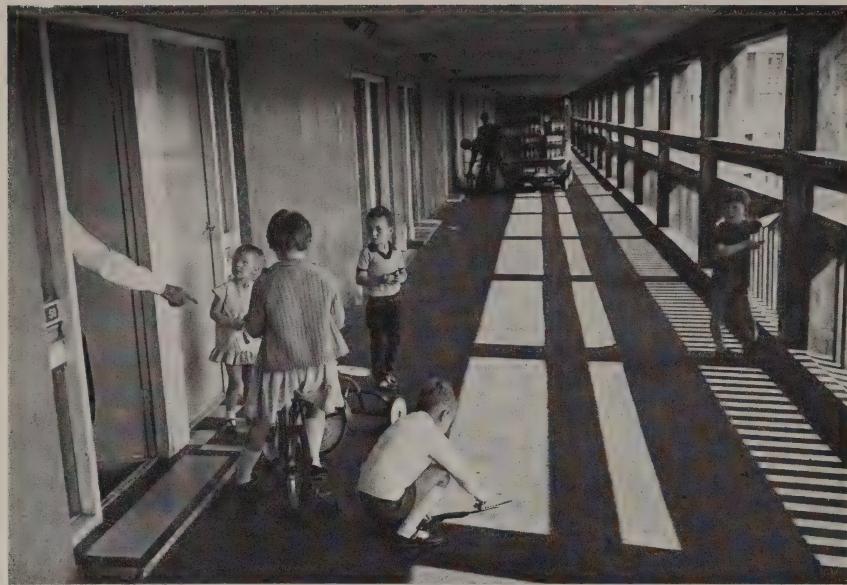
41 WINSTANLEY ROAD



43 WINSTANLEY ROAD
A potentially dangerous deck



42 WINSTANLEY ROAD
An unsuitable area for play



44 PARK HILL

The wide decks were popular play areas

61. It is interesting to note that at Park Hill, for the children at least, the designer's aspiration of creating 'streets in the air' seems to have been realised (Figure 44). Half of the under-11s observed at Park Hill were on the decks, similar to the proportion playing in roads and on pavements on the estates of houses we studied. Much of this popularity was due to the width of the decks. Significantly more children played on the decks on Park Hill and Winstanley Road estates where the decks were 10ft and 5ft (with 10ft 6ins indentations by some of the front doors) respectively, than on other estates with much narrower decks or balconies* (Figures 44 and 45). As well as being close to home, the access areas on these estates allowed the children to circulate freely about the buildings without going outside.

62. Access areas had the further advantage of being covered spaces which provided areas for play even in wet weather. Some were large enough for active play in any weather. At Winstanley Road and Park Hill the popular wide decks were used almost as much in dry weather as wet. But at Acorn and Canada, where the balconies were narrow, their use rose by about a quarter and a third respectively in wet weather.

63. In qualitative terms concrete decks are obviously not ideal play places. However, if councils have to house children above the ground, the provision of wide, well balustraded access decks will go some way towards overcoming the disadvantages by providing play spaces near the dwellings without greatly interfering with pedestrian traffic through them. With ingenuity these play spaces could be made interesting, e.g. by the use of indentations as at Winstanley Road. Dwellings for families with children and for childless households should not be sited on the same decks, so that childless households are not disturbed by children's noise.



45 ACORN PLACE

The narrow balconies were little used for play

*At Edith Avenue where the decks were 8ft wide, insufficient children lived at deck level to draw conclusions about the popularity of these decks for play.

	Gloucester Street %	Woodhouse %	Woodway Lane %	Fleury Road %	St. Mary's %
Roads & pavements	47	33	43	18	18
Paved areas	21	24	23	41	43
Gardens	18	24	13	13	3
Grassed areas	7	12	7	23	9
Play areas	*	*	5	0	18
Wild areas	*	4	7	*	2
Unorthodox areas	6	3	2	5	3
Access areas	*	*	*	*	4
Planted areas	1	*	*	*	0
Total	100	100	100	100	100
Number	3,087	3,524	3,215	980	5,169

* No locations in this category on this estate.

Gardens

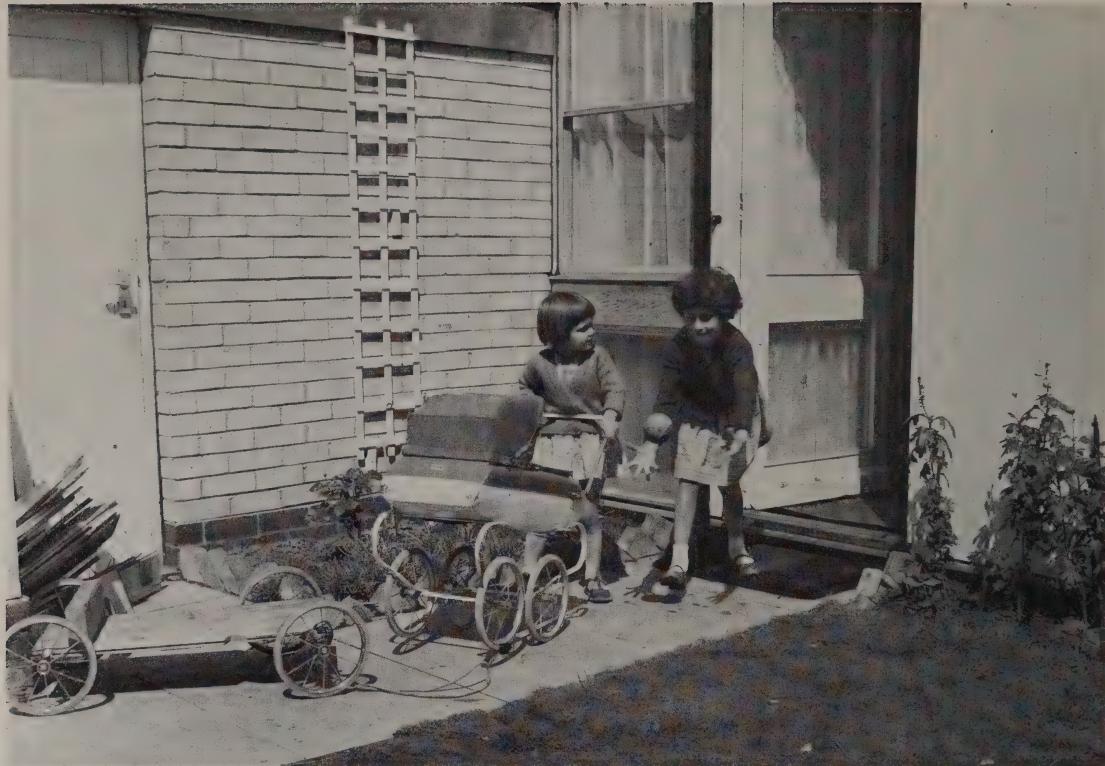
64. All the dwellings on the estates of houses studied had gardens, most of which could be easily observed. Apart from St Mary's and Edith Avenue, few of the dwellings on the mixed-rise and medium-rise estates had gardens, and on those that did it was difficult to observe children at play in them. This means that there was a great difference between low-rise, medium and mixed-rise estates in the number of children playing in gardens. Yet though considerably more children both had the chance to play in gardens and actually played in them on the estates of houses, gardens were by no means the main place for play even for the under-fives (Figure 28). This is contrary to the popular belief that the chief benefit of allocating families to dwellings with gardens is that the garden provides young children with a safe play space. Significantly fewer children of all ages played in gardens than on roads or paved areas, even on the estates where they had equal opportunities to play in either location - Gloucester Street, Woodhouse, Woodway Lane, Fleury Road and St Mary's, (Figure 46). Only in relation to the less popular 'second league' places not immediately adjacent to the dwelling - such as wild and 'unorthodox areas' - were gardens used significantly more for play.

65. The popularity of gardens for play did not depend on their size. For instance the front gardens at Woodhouse measured only 166 sq ft and were the most intensively used of any of the estates and far more popular than the back gardens of 300 sq ft. Similarly at Fleury Road, gardens which averaged 645 sq ft were largely ignored in favour of the smaller paved yards at the back of the houses which were mostly 112 sq ft. The reason seems to be that the preferred areas were closest to the main footpaths and thus to the comings and goings of the estate, providing an interesting and changing environment in which the child could play. Only 3% of all children observed at St. Mary's, were playing in gardens. Though this is probably an underestimate, as not all the gardens could be observed, and can partly be explained by the popularity of the play areas, the gardens were adjacent to little-used pedestrian alleys, and many were screened from any

activity going on there by a high fence. The front gardens at Woodhouse, the back yards at Fleury Road and the back gardens at Woodway Lane were also in direct view of the kitchens so that the mothers could keep an eye on their children who could go from garden to dwelling without passing through the best living room (Figure 47).

66. The popular gardens in the above schemes gave a suggestion of intimacy and security by being enclosed on three sides by fencing even though, except at Woodway Lane, the fencing was very low. As gardens are popular for inactive play a sheltered area is appreciated by the children. The anxiety of mothers with very young children is also decreased if adequate fencing is provided. The low railed fence in the back gardens of Woodhouse was considered most inadequate by many mothers (Figure 48). One mother told how her baby had crawled through the fence and onto the road. She and others had filled in the gap and increased the height of the fence by using wire netting. Adequate fencing should obviously be provided to ensure that young children cannot get out.

67. If the under-fives at least are to be encouraged to play in gardens, where they will be safe from traffic and least likely to disturb other households, designers should try to see the garden as one part of the child's play pattern and to relate it to the kitchen or adjacent living area and to the main circulation routes of the estate. Although the size of gardens did not affect the amount they were used for play, it may be that gardens which are both large and meet the above criteria will be additionally attractive to children. Designers should consider providing larger gardens, at densities where this is possible.



47 WOODWAY LANE

The garden's direct access to the kitchen enabled mothers to keep an eye on their children



48 WOODHOUSE

Mothers complained that the type of fencing provided was not toddler-proof

Planted areas

68. The remainder of the observed play took place in planted, wild, 'unorthodox' and grassed areas. Together these accounted for between a fifth and a third of the observations (Figure 28). Differences in their popularity were not related to building form or density but to characteristics of particular estates.

69. At Acorn Place there were several planted areas consisting of paved squares alternating with shrubs and planted squares in a chequer-board fashion. Many of them were in the courtyards of houses where a predominant amount of play took place on the paved areas. Because the planted areas were not raised above the paving the children counted the paved and planted areas as one, to the detriment of the shrubs and plants (Figures 49 and 50).

70. On all other estates, areas planted with traditional flowerbeds and shrubberies held little attraction for the children. Despite this, the use of these areas by even a few children sometimes created problems, such as plants being destroyed and loose earth scattered on paths. At Gloucester Street, the children had turned the steep banks into slides with disastrous results to the planting (Figure 51). This was remedied by the Council's Parks Department planting thick and prickly shrubs which have now been given a chance to flourish (Figure 52), to the satisfaction of the residents. We know from other studies^{13,14,16} that residents particularly appreciate attractive planting as part of the general appearance of their estates.

71. Planted areas should in some way be protected from children. They are less likely to be used for incidental play if they are raised above the path level and contain prickly plants (Figure 53). Management must be aware that these areas will require regular maintenance. If necessary, plants, shrubs, trees and earth should be replaced. With these precautions planted areas should flourish.



Play in planted areas

49



50

49 and 50 ACORN PLACE

To the detriment of shrubs and plants children counted the paved and planted areas as one



51

51 and 52 GLOUCESTER STREET

The steep banks were used for climbing and sliding by the children. To remedy the resulting damage the Council replanted the slopes with thick planting



52



53 If prickly plants are used for landscaping as in this play area at Basildon New Town, they are less likely to be damaged

Wild areas

72. Having countryside close at hand did not necessarily mean that children played there frequently. Both Woodhouse and Woodway Lane estates were surrounded by open country. Yet only 4% and 7% of children were seen there. At Sceaux Gardens, built on the site of a hospital, the mature gardens had become overgrown. They were an integral part of the estate and more used, accounting for 12% of the observations; the children could play there and still be close to their homes. For the under-fives and five-to-tens these wild areas were the most popular location after paved and access areas.



54 WOODHOUSE
Open country adjacent to the estate-little used for play

73. Open country should not be regarded as playspace for children under 11 unless it is an integral part of the estate. At Woodway Lane significantly more over-11s than under-11s were seen in the wild areas. For these older children, the wild areas presented an attractive alternative area for play and were the third most popular location. The more active pursuits in these areas included digging.

74. It cannot be assumed that mothers in low-density suburban and rural areas any more than their urban counterparts are going to be willing to let their children, particularly those under 11, out of their sight into the adjacent wild areas. Their worries are the same if for different reasons. Holme and Massie,³ in comparing the attitudes and habits of mothers and children in Southwark and Stevenage, found that a fifth of the mothers in both areas

were worried about the dangers of their children being molested by strangers. In Southwark they were concerned about people like meths drinkers, and in Stevenage that 'sex maniacs' might be lurking in the nearby bushes and fields. At Woodhouse, some of the mothers complained that the stream on the edge of the estate, which one might have thought an ideal play place, was dirty and unhealthy, and some forbade their children to play there.



55 SCEAUX GARDENS
Wild areas were an integral part of the estate-well used for play

75. It is important when estates are built adjacent to wild areas that designers appreciate that they must provide for children's play both in the design of the whole estate and also in the provision of specific play facilities, just as when they are designing an urban estate. However where wild areas are within the confines of sites they should be retained in their natural state if possible. Where a stream runs through a site it should be seen as a valuable asset and kept clean and maintained.

'Unorthodox' areas

76. 'Unorthodox' areas included tops of walls and railings, garage roofs, trees etc. in fact, any place children were not supposed to be. Only 3% of children were seen in these areas pursuing their 'unorthodox' activities. The only estate on which a disproportionate number of children were seen in 'unorthodox areas' was Gloucester Street. Here a high stone wall bounded the estate; it belonged to the University of Sheffield's Genetics Department and playing 'on the genetics' was very popular with the 11 to 15-year-old boys, a fifth of whose outdoor activities took place there. At Edith Avenue, a popular activity with some of the children, which was coded as 'unorthodox', consisted of making swings from the thick wires supporting saplings.

77. It seems clear that any feature of the site that offers children the opportunity to climb or pursue other activities will be put to use. For example, where garages had flat roofs children climbed on them. It is probably not possible to prevent this, so such roofs should be strong enough to cope with it, and the waterproofing designed to withstand a certain amount of use. It is probable that features of the site will be used by children and designers must consider the effect on the feature or structure itself, on the surrounding spaces, and on people living close by. Where a structure or feature could be used by children without causing any major difficulties it should be designed with their needs in mind.



'Unorthodox areas'

Any feature of the site which enables children to climb or pursue other activities should be strong enough to withstand them

56 Woodhouse



57 Gloucester Street

Grassed areas

78. On average, slightly less than one-tenth of the children were observed playing on grass. This is probably because, unlike hard surfaces such as roads and pavements, grass is suitable for only a small range of activities, particularly after rain. Children are also discouraged from playing on grass if residents feel that this detracts from its appearance. This was certainly so at Gloucester Street, where, on a small estate of 39 houses, the only grassed area was a large communal one in the centre measuring over 5,000 sq ft. Residents without children complained that children damaged the area and spoilt its appearance, and they wanted it fenced in with more shrubs, flowers and seats. Pressure had resulted in the Housing Department putting up a notice forbidding the playing of ball games (Figure 58).

79. On several of the estates there was a definite rule that children were not allowed to play on grass, though whether or not the rule was kept depended largely on the attitude of individual caretakers, who were often prepared to turn a blind eye to children playing on grass. On one estate where this rule applied, a tenth of children were observed on grass. At another, where older children were officially not allowed to play on grassed areas, a fifth of 11-15s' play took place there.

80. As with the planted and wild areas, it was the character of the grassed areas rather than the density or size of the estate which affected the amount and type of play that took place there. They varied considerably between the different estates. On those where the grass was reasonably flat and large enough for games of football they were popular for play; but less so on those with the same amount of grass but where it was broken down into small areas, or dotted with shrubs and trees or was sloping. For instance at Park Hill, Canada and Warwick there were large areas of uninterrupted grass which were extremely popular for ball games, particularly with boys from 11 to 15. At Park Hill, where almost half of the space was taken up by large grassed areas, almost half of all ball games were played on them, perhaps because the spacing of trees provided suitable goal posts (Figure 59), although there were two hard-surfaced pitches of 5,220 sq ft and 12,740 sq ft on the estate. Consequently the grass became very worn. In contrast, at Woodway Lane, the grassed areas were split up by pedestrian footpaths and so unsuitable for organized ball games. Though the total amount of grass was similar at both Woodway Lane and Canada estates – just over a quarter – only 3% of the 11-15s at Woodway Lane played on it compared with 13% at Canada. However the grassed areas on both estates attracted a tenth of the under-fives, the reason being probably that at Woodway Lane the grass was close to the dwellings and so was included in small children's doorstep play.

81. The highest proportion of play on grass – almost a quarter – was at Fleury Road. As at Woodway Lane, children could play on the grass and still be near home although the paving, also close to home, was more popular.

82. Some estates like Acorn Place and Curnock Street had very little grass and on others the grass was carefully landscaped to prevent excessive use. At Winstanley Road the areas of grass were fairly small, heavily contoured and raised above the level of the walkways within retaining walls (Figure 61). Also, few of the grassed spaces provided through routes, as they were surrounded by dwellings and caretakers discouraged their use.

83. The designer, when considering a grassed area, must decide whether its purpose is for appearance or for children's use. If it is to be largely decorative, friction between tenants is less likely, and management problems will be fewer, if grassed areas are designed

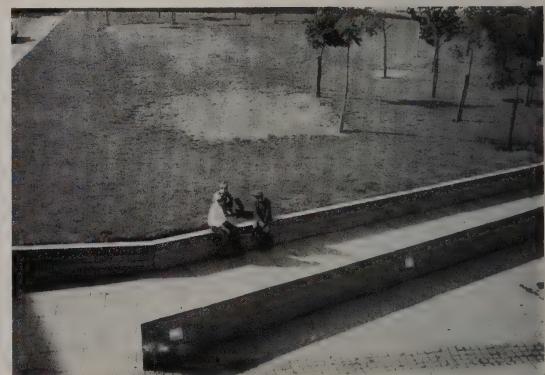
and placed so that children will not be inclined to use them. Where it is intended that children should use them they should be large enough to reduce intensity of use, and there should be several points of access to avoid excessive wear and tear in some parts. As they will undoubtedly be used for ball games and other active pursuits they should be sited away from dwellings in order to reduce noise and the possibility of broken windows.

Play on grassed areas



58 GLOUCESTER STREET

The Housing Department put up a notice forbidding ball games following complaints by residents without children who valued the communal grassed area for its appearance only



59 PARK HILL

Grass was well worn particularly where the spacing of trees provided suitable goal posts



60 CANADA

Low railings did not prevent children from playing on the grass



61 WINSTANLEY ROAD

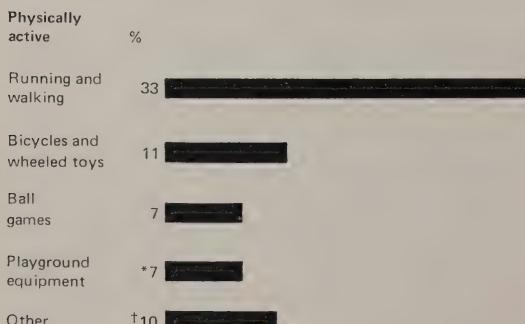
A rolling grassed area, raised above the level of the paving, is less likely to be used for play

3 What the children were doing

84. The way the children used their time outside is shown in Figure 62. But it should be remembered that only broad activity classifications were used. Because it was not possible to define the precise nature of the activities, conclusions about the quality of the children's play have not been attempted.

85. Where children played was greatly affected by the layout, density and rise of the estate; what they were doing was not (Figure 63). Certainly from interviewing some of them (Chapter III) the limitations they mentioned did not concern the layout of the estates, but those imposed by adult management, like not being able to play ball on the grass at Warwick. The exceptions to this were that on the estates of houses more children were seen running and walking and on bicycles and playing with wheeled toys than on medium and mixed-rise estates. Here, the roads and paths formed a large network linking all parts of the estate, and were thus suitable for those activities. On these estates and at Sceaux Gardens, where a fifth of children were seen with bicycles and wheeled toys (Figure 65), there were better facilities on the ground for storing bicycles and cumbersome wheeled toys. More observations of 'physically inactive' play were recorded on the higher than on the lower-density estates. This was partly due to the prevalence of access areas on these estates. A third of all children sitting, standing or lying down were seen in these areas,

62 What the children were doing



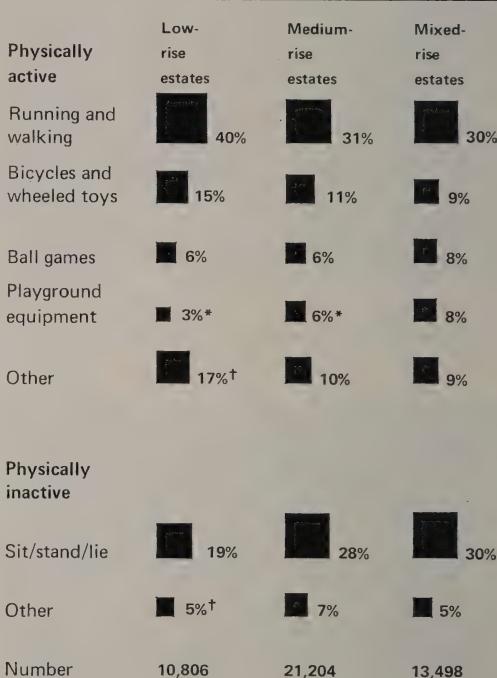
* This percentage was adjusted to exclude the numbers of children observed on the estates which did not have play equipment.

† These percentages were adjusted to exclude the numbers of children observed on the estates where the activity categories were not divided into physically active and inactive.

Therefore totals exceed 100%.

which were not only near to the dwellings, but sheltered from all weathers, providing intimate nooks and crannies suitable for quiet play.

63 What the children were doing, by types of estate



* Percentages were adjusted to exclude the numbers of children observed on those estates which did not have play equipment.

† Percentages were adjusted to exclude the numbers of children observed on those estates where the activity category was not divided into physically active and inactive.

Therefore totals exceed 100%.

86. Most groups of children seen out were of various ages and both sexes, showing that in housing estates the design of play spaces and other areas specifically for one age group may be unwise. Further, children of all ages and both sexes seemed to enjoy the same things with a few differences (Figure 68). Play with wheeled vehicles and toys was enjoyed by small children of both sexes: for the over-11s it was mainly a male pursuit. Few small children of either sex were seen playing ball; as with play with wheeled vehicles, by the time secondary school age had been reached, this was predominantly a male activity. A seventh of the boys but only a twentieth of the girls in this age group were observed playing ball games. Girls of all ages were seen walking

and wandering more than boys, reaching a peak with adolescent girls, where a third of the observations were in this category. Girls spend more time than boys on household chores and possibly many of the girls, in particular 11 to 15-year-olds seen walking, were on errands for their mothers.

87. Many mothers see the main advantage of outdoor play as a release from the restrictions of being indoors. Outside, the children can benefit from fresh air, take part in boisterous games and generally use their immense physical energy in freedom. Two-thirds of the observed activities were classified as 'physically active' and the remaining third as 'physically inactive' or 'quiet' (Figure 62). The peak ages for active play for both sexes were from five to ten, and rather more boys of all ages were 'physically active' than girls. However, by no means all outdoor play was boisterous. A third of the observed activities were classified as 'physically inactive'. These included imaginative games such as playing shops, hospitals, dressing up and playing with their own toys and books.

88. Most of the quiet play was accounted for by children seen sitting, standing or lying down. Such largely unspecific activity is not necessarily aimless and wasteful. No doubt many of the children observed sitting or standing around the estate were resting. It is generally recognised that children especially younger ones often pursue any one activity for a relatively short period and then look around for something else to do. They may also have been quietly watching the life of the estate and learning from the many adult activities going on around them. It is interesting to note that even at the Warwick Estate Adventure Playground, where a wide range of activities was provided, a quarter of the children were observed standing or wandering around, not noticeably engaged in any purposeful pursuit.

89. Designers should therefore remember that not all a child's time out of doors is spent in boisterous play. Children need opportunities for quiet. The provision of sheltered enclosed areas near to home as discussed above, and benches, seats and low walls, can go a long way towards ensuring that the spaces outside the home are sociable meeting places for children.



64 GLOUCESTER STREET

Bicycles and wheeled toys were popular on the estates of houses

90. No doubt some of the children were bored and under-stimulated at times. The immediate housing environment cannot meet the total needs of the child and it can reasonably be expected that only good supervised play facilities can provide a sufficient variety of creative activities to supplement the experiences of unsupervised outdoor play. (This is discussed in more detail in paragraphs 182-208.)



65 SCEAUX GARDENS

Bicycles were also popular on this mixed-rise estate where there were good facilities for storing them at ground level

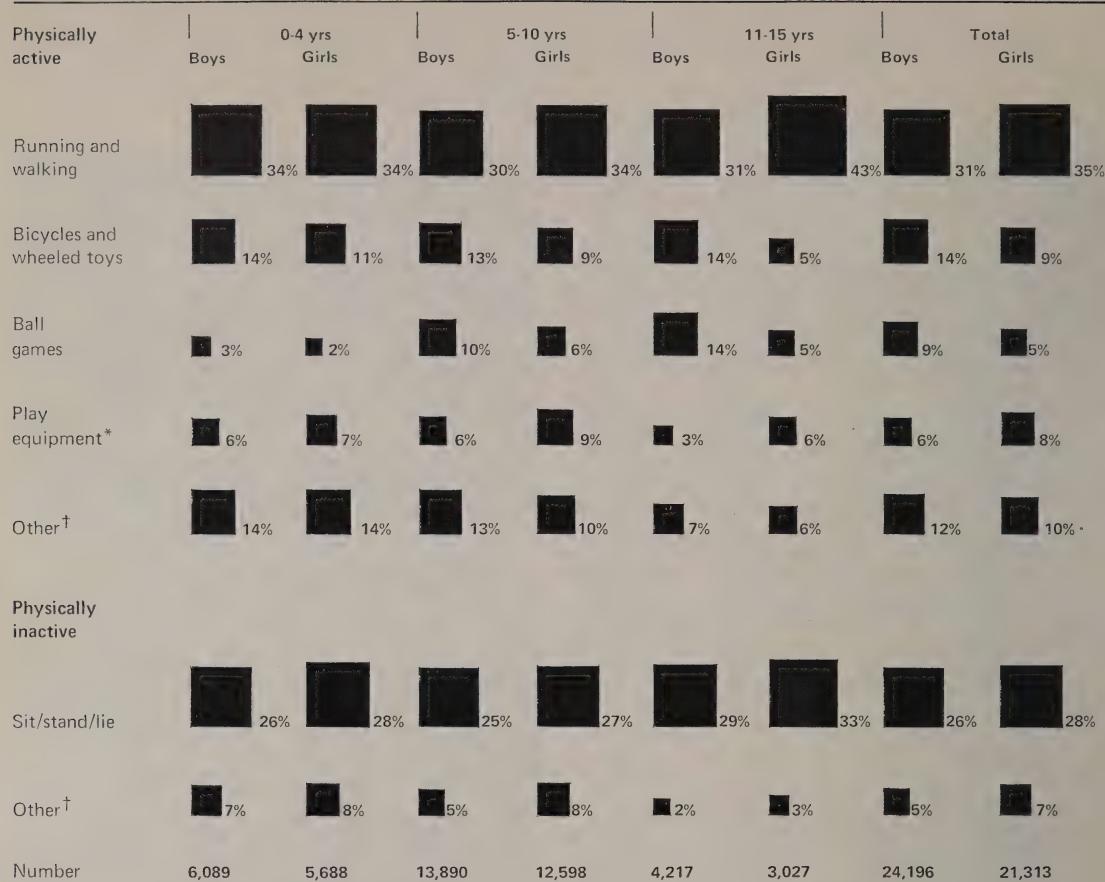


66 Acorn Place



67 Park Hill

66 and 67 Access areas were popular places for quiet play



* Percentages were adjusted to exclude the numbers of children observed on those estates which did not have play equipment.

† Percentages were adjusted to exclude the numbers of children observed on those estates where the activity category was not divided into physically active and inactive.

Therefore totals exceed 100%.



69 Park Hill

69 and 70 Most groups of children seen out were of various ages and both sexes



70 St Mary's



71 Woodway Lane

71 and 72 Ball games were most popular with school-age children



72 Gloucester Street

Playing shops, hospitals, dressing up and playing with toys and books were some of the imaginative activities categorized as 'physically inactive' play



73 St Mary's



76 Acorn Place

74 Woodway Lane



75 Gloucester Street



77 Park Hill



78 St Mary's



79 Warwick Estate Adventure Playground

4 Play areas

91. It was one of the recommendations of the Parker Morris Committee²⁴ that all housing estates at higher densities should provide 20–25 sq ft of play space for every family bedspace. However a random sample of recently completed local authority housing schemes taken ten years later, in 1971,¹³ showed somewhat surprisingly that of 94 schemes containing family dwellings only 27 provided space for play. The type of provision varied considerably from one authority to another, both in terms of space and of equipment. This was also true of the 15 estates on which play observations were carried out. The amount of space provided ranged from 0.1 sq ft per bedspace to 15.1 sq ft per bedspace (Figure 80), and the scheme built at the highest density with the least space about buildings had the most play space. The range and type of equipment also varied. There was the more conventional type of playground equipment, both moving and static, including swings and slides. Some estates had architectural equipment individually designed for each estate, and included mazes and stepping stones. (For a complete list of the equipment in each category, see Figure 81.) Ball-games areas were hard-surfaced and enclosed. They did not include large grassed areas subsequently taken over and used by the children for ball games.

92. Less than half of the estates provided more than two of the four types of provision shown in Figure 82 and they were all high-density estates. Of the four estates of houses, Woodway Lane had equipped play spaces, Fleury Road had designated play space but

no equipment (Figure 83), and Woodhouse and Gloucester Street had neither. This perhaps reflected the view that play spaces are less needed at low densities, where families live in houses with gardens.²⁵

93. Apart from the adventure playground at Warwick, none of the play areas was supervised either full or part time by trained play leaders, nor did they provide for indoor play. At Winstanley Road and Acorn Place some of the play areas were at deck level or over garages (Figure 84). On all other estates the play provision was at ground level. At Canada the estate was adjacent to

81 Types of play equipment provided on the estates

Moving equipment	Static specialist equipment	Static architectural equipment
Swings (including cradle seats)	Tubular climbing frame	Mazes
Merry-go-round	Tubular climbing ladders	Play platforms
Whirling platform	Somersault bars	Concrete climbing frames
Rocking horse	Slides	Climbing blocks
Rocking boat		Climbing columns
See-saws		Wendy houses
Pendulum see-saws		Pyramid
		Tunnels
		Concrete slides
		Forts
		Mushrooms
		Stone seats
		Fairy circle (seats)
		Play shelter
		Play shops
		Play sculptures
		Toddlers' table
		Empty paddling pools
		Empty sand-pits
		Tree trunks
		Wooden play house

80 Amount of playspace provided, by estate

Estate	Sq ft of playspace per child bedspace	Sq ft of playspace per bedspace
L = Low rise		
M = Medium rise		
Mx = Mixed rise		
Canada (Mx)	30.3 sq ft (5.0 sq ft)*	15.1 sq ft (2.5 sq ft)*
Park Hill (Mx)	30.2 sq ft	14.5 sq ft
St Mary's (M)	28.8 sq ft	12.8 sq ft
Winstanley Rd (Mx)	21.5 sq ft	10.2 sq ft
Edith Ave (M)	21.1 sq ft	9.6 sq ft
Acorn Place (M)	20.0 sq ft	9.8 sq ft
Woodway Lane (L)	19.7 sq ft	11.0 sq ft
Curnock St (M)	16.4 sq ft	8.7 sq ft
The Bonamy (M)	5.2 sq ft	2.7 sq ft
Fleury Rd (L)	2.4 sq ft	1.2 sq ft
Seaux Gardens (Mx)	0.2 sq ft	0.1 sq ft

*This excludes park adjacent to the estate but included in the observation area.

NB—Although playspaces were provided on Warwick, separate information is not available for only that part of the Estate studied (see Appendix 2, paragraph 30).

Estate	Moving equipment	Static specialist	Static architectural	Ball-games area
L = Low rise				
M = Medium rise				
Mx = Mixed rise				
St Mary's (M)	+	+	+	+
Winstanley Rd (Mx)	+	+	+	+
Canada (Mx)	+	+	+	+
Acorn Place (Mx)	+	+	-	+
Park Hill (Mx)	-	+	+	+
Warwick (Mx)	-	+	+	+
Curnock St (M)	+	+	+	-
Edith Ave (M)	-	-	+	+
The Bonamy (M)	-	+	+	-
Woodway Lane (L)	-	-	+	-
Sceaux Gardens (Mx)	-	+	-	-
Woodhouse (L)	-	-	-	-
Fleury Rd (L)	-	-	-	-
Royal College St (M)	-	-	-	-
Gloucester St (L)	-	-	-	-



83 FLEURY ROAD
The one play area was unequipped

a small park with a ball-games area and a play area equipped with conventional play equipment. We included this in our observations as it was not cut off from the estate by any roads and was used by the children as part of the estate (Figure 85).

94. At Park Hill and St Mary's the play areas attracted almost a fifth of the observed children (Figure 86). On five estates only a twelfth were seen in play areas, and on the remaining estates the play areas were even less popular. The adventure playground at Warwick, which attracted 12% of the children, was no more popular than the play areas at Canada, Curnock Street and Acorn Place, and less popular than those at Park Hill and St Mary's.

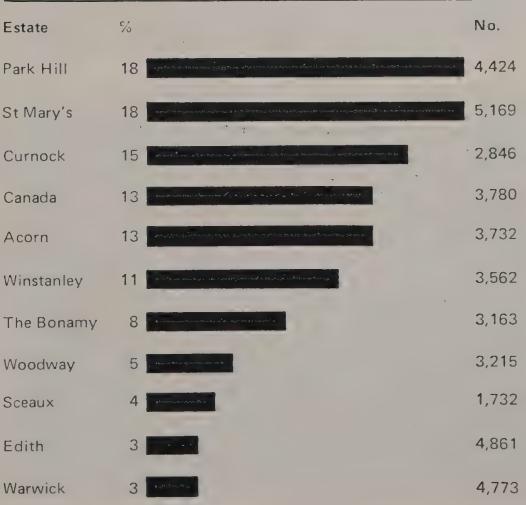


84 WINSTANLEY ROAD
One of the play areas here was built over parking space



85 CANADA
Play area immediately adjacent to the estate

86 Percentage of children seen in play areas on each estate



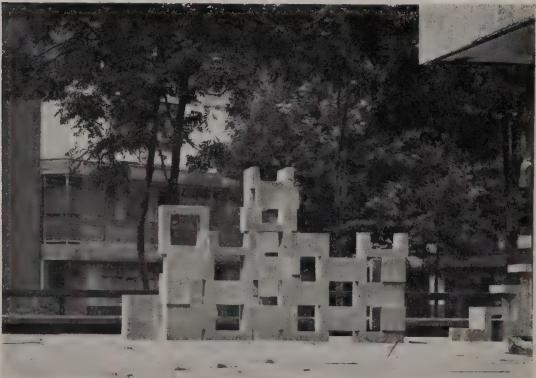
Play equipment

95. Few children were attracted to architectural equipment in play areas, (Figures 87 to 89). On estates where they had a choice of different types of equipment they preferred the conventional (Figure 90). At Park Hill, St Mary's, Acorn Place, Canada and Winstanley Road, far more children were seen in areas with conventional playground equipment, whether static or moving, than in those with specialist architectural shapes. At Woodway Lane, where only architectural equipment had been provided (Figure 89), less than one in 25 of the children was seen in the play areas.

Architectural equipment was unpopular



87 St Mary's



88 Winstanley Road



89 Woodway Lane

96. Conventional equipment was most popular with children of all ages. What was popular with one age group was popular with another, though the play areas at Park Hill containing sand-pits and climbing frames were more popular with pre-school children, and ball-games areas with over-tens. Even the over-tens played more on swings and roundabouts etc. than in ball-games areas. Surprisingly the ball-games areas were little used (Figures 96 and 97). Even at Park Hill, which had provided two ball-games areas, including a large area of 12,740 sq ft (the Parker Morris recommendation was 6,600 sq ft²⁴), these attracted no more than a tenth of boys over ten. On all other estates ball-games areas were used considerably less by children of all ages.

90 Examples of the relative popularity of various types of play areas

Estates with areas of conventional equipment and ball-games areas and/or architectural equipment

St Mary's

	% total play in these areas
2 conventional areas	13.97
1 ball-games area	0.77
4 architectural areas	3.16
<hr/> Total play	<hr/> 17.90%

Acorn Place

	% total play in these areas
2 conventional areas	12.68
1 ball-games area	0.38
<hr/> Total play	<hr/> 13.06%

Canada

	% total play in these areas
1 conventional area	6.83
1 ball-games area	2.57
3 architectural areas	3.83
<hr/> Total play	<hr/> 13.23%

Winstanley Road

	% total play in these areas
3 conventional areas	8.65
1 ball-games area	1.52
3 architectural areas	0.79
<hr/> Total play	<hr/> 10.96%

Popular equipment



91 St Mary's

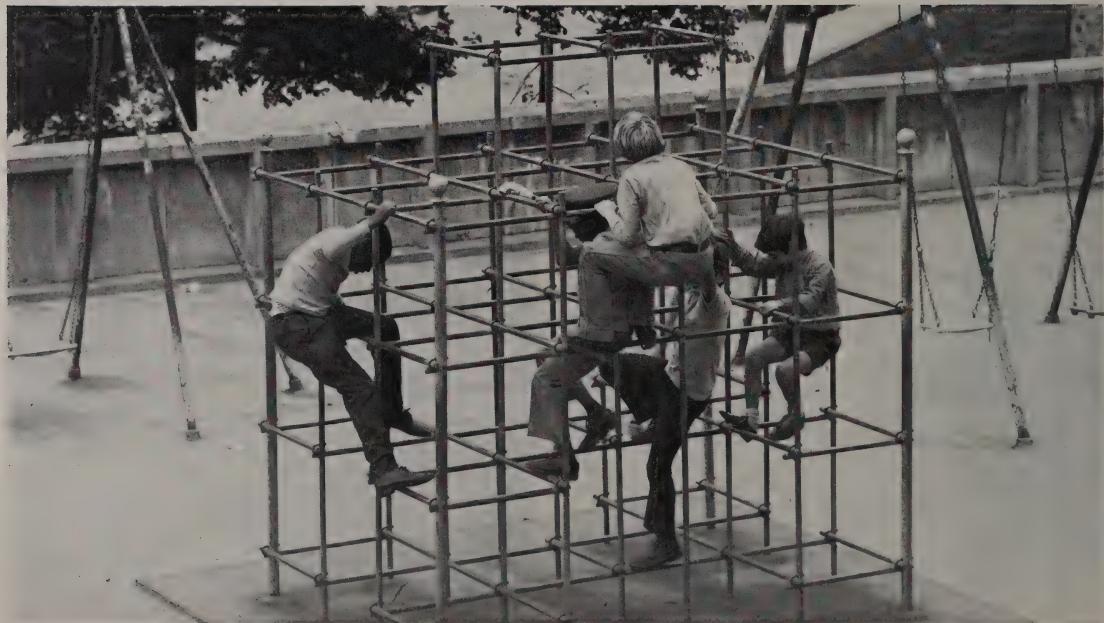


92 St Mary's

Popular equipment



93 Canada



94 Winstanley Road



95 Winstanley Road

97. Interviews with children too, revealed that their own choice was for conventional equipment (paragraph 165) even though the children at St Mary's and Warwick were familiar with architectural equipment. Visiting parks and recreation grounds to play with swings and slides or to play ball was what most of the seven to 11s in Paddington and Oldham liked best. The Building Research Station report⁷ also showed that when children between six and 11 were asked to write essays on 'Where I like to play' similar items of equipment featured prominently. Though the children's ideal was a large park with all their favourite equipment, this does not mean that they cannot get a considerable amount of enjoyment from even one carefully chosen item. This should be placed where as many children as possible can enjoy its occasional use, for instance, on paths to schools and shops, and where the disturbance to adult and elderly households will be minimal.

98. We are not the first researchers to have discovered that children use conventional playground equipment more than

architectural. The Building Research Station research team reported that items more traditionally associated with playgrounds 'consistently attract a high level of usage, even where other less conventional items are available. A number of the architectural items are little used.'⁷ And Holme and Massie too found that 'swings, slides and gymnastic items are high on the list and are preferred and used more frequently by children than the fantasy type of equipment, unless these also provide scope for gymnastic activity'.³

99. Some people may feel however that there is little educational and developmental advantage in conventional equipment, as children cannot change or manipulate it, and spend very little time using any one item. It is perhaps overlooked that such equipment is an aid to physical development and that young children need opportunities to practice climbing, balancing etc. There seems little point in providing equipment which, while it may be more potentially constructive, is rarely or scarcely used by the children.



96 Edith Avenue



97 Winstanley Road

Cost of play areas

100. Further, in terms of value for money, architectural equipment can prove very wasteful. One play area at Canada, for example, consisting of a concrete maze, cost £2,248* for materials, paving and drainage, and attracted only 2% of the children (Figure 98). Yet at Acorn Place a play area of swings and slides cost £1,320 and attracted 7% of the children (Figure 99). Eleven per cent of the observed children played in the main play area at Oldham with swings, slides and fort, paddling pool and climbing frame, and which cost £6,270 (Figure 100). At Warwick the eight play areas, consisting mainly of concrete structures, cost £24,783 and attracted only 3% of the children (Figures 101 and 102).

*The costs quoted are not actual scheme costs, but are a comparable valuation based on prices ruling for average local authority schemes in early 1972. They therefore eliminate the many variables between individual schemes.



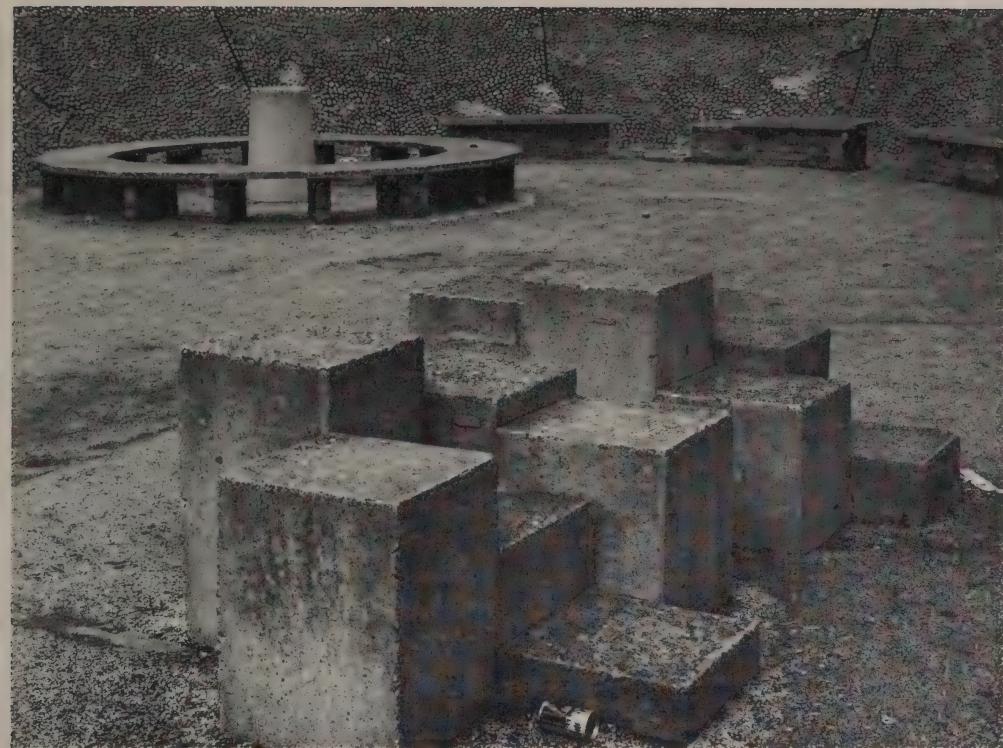
98 CANADA
The costly maze was little used



99 ACORN PLACE
This area was much cheaper and was better used



100 ST MARY'S
This area was very well liked by the children



101



102

101 and 102 WARWICK ESTATE These play areas were unpopular and expensive

101. The popularity of the play areas was therefore not related to their cost. Some of the least expensive play areas were the most successful, and some of the most expensive the least used (Figure 103). For instance, the play areas at St Mary's, with the lowest cost per sq ft, were among the most used. The cost per sq ft of play space ranged from 47p to £1.74.

likely to be provided by older brothers and sisters. Therefore there may be disadvantages in providing play areas which segregate children of different ages.

103 Cost and use of play areas, by estate

Estate	Cost per sq ft*	Percentage of use		No.
		£	%	
Winstanley	1.74	11	[REDACTED]	3,562
Curnock	1.58	15	[REDACTED]	2,846
Acorn	1.32	13	[REDACTED]	3,732
Canada	0.95	13	[REDACTED]	3,780
The Bonamy	0.95	8	[REDACTED]	3,163
Warwick	0.92	3	[REDACTED]	4,773
Edith	0.87	3	[REDACTED]	4,861
Sceaux	0.75	4	[REDACTED]	1,732
Park Hill	0.74	18	[REDACTED]	4,424
Woodway	0.50	5	[REDACTED]	3,215
St Mary's	0.47	18	[REDACTED]	5,169

* The costs per sq ft quoted in the table are not actual scheme costs, but are a comparable valuation based on prices ruling for average local authority schemes in early 1972. They therefore eliminate the many variables between individual schemes. They include the cost of: construction; play equipment; seats, litter bins and lighting; enclosing walls, fencing and ballustrading; planting; paving, grassing and turfing; drainage and general excavation.

Amount of play space

102. However, the success of play areas was related to the *amount* of play space provided, proportional to the number of children living on each estate. Park Hill and St Mary's provided the most space for play and these were two of the three estates whose play areas were the most used. On the third estate – Curnock Street – though there was less play space per resident child, there was an above-average amount of conventional equipment. A significant relationship was found between the use of play areas and the number of items of conventional equipment in them. Thus Curnock Street, and to a lesser extent Acorn Place and Winstanley Road, compensated somewhat for their lack of play space by providing, in certain play areas, not only the type of equipment which children enjoyed using but enough of it to attract the children.

Location of play areas

103. Large groups of children were more often seen in play areas than in locations close to the dwellings such as roads, paved and access areas and gardens (Figure 104). It would seem that the well-equipped play areas provided a social centre where children of all ages and of both sexes could meet their friends and play together. Few under-fives were seen accompanied by adults in play areas and any informal supervision of young children was

104 Play locations, by size of groups, at Fleury Road, Acorn Place, Park Hill, Sceaux Gardens, Canada and Winstanley Road

Play locations	Children alone	Children in groups of 2-4	Children in groups of 5-10 or more	Children with adults	Total %	No.
Roads, pavements, etc	29%	52%	13%	6%	100	1,734
Paved areas	27%	51%	18%	4%	100	5,018
Grassed areas	13%	51%	35%	1%	100	1,524
Play areas	18%	48%	35%	—	100	2,539
Unorthodox areas	13%	59%	27%	1%	100	393
Access areas within buildings (5 estates)	28%	54%	16%	2%	100	6,398
Private gardens (5 estates)	29%	63%	7%	1%	100	224
Planted areas	15%	55%	28%	2%	100	272
All areas	24%	52%	22%	2%	100	18,102

NB — The 108 children seen in the library at Winstanley Road are excluded because it was impossible to tell which children were in groups.



105 Canada

105 and 106 Large groups of children were more often seen in play areas than in other areas close to home



106 St Mary's



107 EDITH AVENUE

At the time of the observations the sand in the pit had not been renewed for three years

104. There are also disadvantages in providing play areas which are too far from home. 'However good the neighbourhood play facilities are, some provision on an estate, at least for the younger age groups, is essential.'¹⁷ Apart from parental concern about letting children stray too far, during school term at least, with all the competing activities which take place inside the home, the children have little time to travel far to play spaces (paragraph 170). A child's play environment is extremely circumscribed and neighbourhood provision, however near, is no realistic substitute for play areas which children can use casually at any time without relying on adults or older brothers and sisters to take them there.

Siting of play areas within housing estates

105. Not only are play spaces needed on all housing estates but their careful siting within the estate is crucial. Part of the success of the main play area at St Mary's may have been not only that it provided the type of equipment the children enjoyed, but that it was a large centrally-placed area with safe access to the children's homes nearby. Yet though the family dwellings should be adjacent to play spaces, designers should resist the temptation of seeing play areas as a focal point of interest for old people, particularly if their living rooms are immediately adjacent to play areas. Adult and elderly households dislike the noise and disturbance from young children, and the loss of privacy this produces.^{13,14,15,16} A successful play area will be a noisy place where all age groups meet, and in the event of conflict between the needs of childless households for peace and the young for noise, it will usually be the children who lose. All too frequently play equipment is removed or locked up after complaints from adults.

Maintenance and management of play areas

106. Some play areas proved white elephants not only because of the type of equipment provided but also because of the lack of maintenance. At St Mary's, sand had originally been put in the 'fairy circle' of stone seats, but as it was not completely enclosed the sand spilled over onto the surrounding paving, creating a constant headache for the caretaker, and a rapidly diminishing supply of sand (Figure 108). The sand has now been completely removed, and the stone circle little used (Figure 109). The brick 'castle' at Woodway Lane for some unknown reason was provided without drainage. This soon became known as 'the mucky pool' and a favourite 'aiming' target for little boys (Figure 110). After complaints from the residents it was filled in and paved over (Figure 111). At Edith Avenue the three sand-pits costing a total

of £2,557 had been filled with sand when the scheme had been first occupied, three years before the time of the observations. Since then the sand had not been renewed (Figure 107). The little sand that remained was in a very poor condition. Less than 1% of the children played there.

107. It is essential that at the design stage of schemes the architects find out from the people responsible for the maintenance of play equipment – usually the housing manager or local authority engineer – whether maintenance and management of the type of equipment they are hoping to include is feasible or not. Sand-pits and paddling pools give children pleasure, but need daily attention. This can be part of the daily cleaning routine of schemes large enough to have daily caretaking staff to clean and maintain other communal areas. Raking out a sand-pit will take no longer than sweeping the stairs. At Park Hill, for example, the estate caretaker rakes and cleans the sand-pits each day and the sand is changed every six months. Here the sand-pits were well used, particularly by the pre-school children. Experience at St Mary's would suggest that paddling pools, apart from regular maintenance, also require some form of adult supervision. Mothers on this estate found that without supervision the children were getting wet and muddy in cold weather and the smaller ones were at risk of being pushed in by the older ones. It was therefore agreed that the estate caretaker would only fill the pool on exceptionally hot days and at the same time keep an eye on the children. Our observations took place on two such hot days and the pool was in great demand.



108



109

108 and 109 ST MARY'S

The sand-pit at St Mary's used to be well used but because of its design the sand spilled over on to the path to the annoyance of tenants. The sand was therefore removed and the pit paved over



110



111

110 and 111 WOODWAY LANE

The 'castle' was not provided with drainage and soon filled up with stagnant water. It was later filled in and paved over



112 ST MARY'S

The pool was only filled on very hot days

108. Most items of conventional playground equipment need occasional oiling and repainting and regularly checking for wear, damage and replacement. None of the housing managers or borough engineers responsible for such equipment on the schemes we studied regarded this as an onerous duty. Play equipment was regarded like any other item of property on the estate for which the local authority was responsible, and cleaned and maintained accordingly. No distinction was made to us about moving and non-moving equipment; responsibility for reporting faulty equipment was in some cases with estate officers, in others with rent collectors, or even tenants. The British Standards Institution recommends that equipment '... should be inspected by a responsible representative of the purchaser at weekly intervals' and that '... a log book be kept for each item of apparatus and that the person(s) responsible for maintenance should be required to certify, by signing the log book each week, that the equipment is not in need of repair'.²⁶

109. There did not appear to be problems of insuring against injury on different types of play equipment; in most cases equipment was covered by general third-party insurance. Accidents occur wherever children play, though there are those who would say that children suffer more accidents on conventional equipment. Official accident statistics do not reveal how many children are hurt while playing on play equipment. However we can find little evidence from elsewhere that children are more liable to have accidents on conventional equipment. There seems little point in denying children access to what they enjoy using, particularly as it may be the child who is bored through lack of adequate play facilities who is accident-prone.

110. Seats for mothers should be provided in play areas and should regularly be checked for wear and tear along with the equipment. Litter bins will also help to ensure that the play areas are kept tidy. Lavatories, wash basins and drinking fountains should be within a reasonable distance of play areas and should be kept in working order, especially where children have to go up flights of stairs or up in lifts before reaching home. It is a common complaint that lifts are fouled by children using them as lavatories.

Landscaping

111. Play areas need careful landscaping, and attention given to their appearance. The appearance of housing estates is one of the most important factors influencing the residents' overall satisfaction.^{13,14,15,16} All too easily play areas can be an eyesore of asphalt. Yet the work of landscape architects such as Mary Mitchell in Birmingham and Blackburn, and Patrick Dawson in Basildon, shows that they can be made attractive, especially if a landscape architect has been involved in their design from the early planning stages of the whole estate. 'It is not his function to be called in at a late stage to titivate the architect's plans with trees and shrubs'.²⁷

112. Natural features such as mounds and existing trees should be retained wherever possible and advantage can be taken of surplus soil from excavation of the rest of the estate (Figures 113 and 114). If slides are built into mounds they not only add to the attractiveness of the play area but are, in addition, the safest way of providing them. The large play area at St Mary's and the grassed areas at Winstanley Road are examples of areas where a rolling topography has greatly added to the attractiveness of the estate.

Play areas need not be an eyesore of asphalt



113 Basildon New Town



114 Basildon New Town



115 St Mary's

115 and 116 Grass planted very close to equipment becomes badly worn. Slides should be flanked by hard surfacing



116 Gorse Ride, Finchampstead



117

117 and 118 Granite setts and tree trunks have been used in the landscaping of these play areas at Queen's Park Flats, Blackburn



118



119 Gorse Ride, Finchampstead

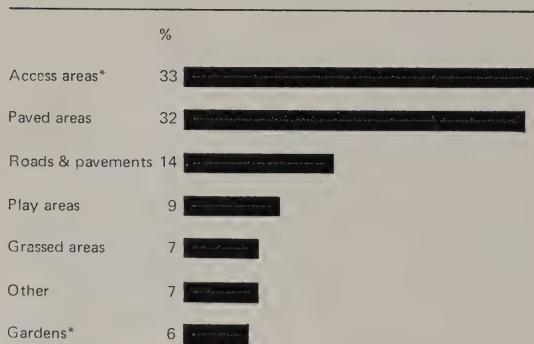
113. Experience at St Mary's has shown that grass planted very close to equipment will get badly worn (Figure 115). This has been avoided in a later scheme at Gorse Ride, Finchampstead. Hard surfacing such as granite setts can be flanked by grass, thereby avoiding unnecessary acres of flat concrete (Figure 116). Mary Mitchell has enhanced the appearance of play areas by the use of granite setts and tree trunks (Figures 117 and 118). A variety of surfacing materials as used throughout Winstanley Road estate helps to create an attractive environment. Synthetic materials are now available which very often are pleasanter to look at than concrete and have the additional advantages of drying quickly after rain and of being less hard to fall on. If the guide-lines given in paragraph 71 regarding the provision of planted areas are followed, there is no reason why planting should not be provided in play areas.

114. In schemes where there are no facilities for indoor play it is essential that play areas should be sheltered from wind and cold. Such areas are social meeting places and the children have no wish to stand around talking to their friends in exposed open spaces. Mounds and thick planting of evergreens not only look attractive but also act as windshields. Play areas can be sheltered by sinking them below the level of the buildings.

Ages of children using play areas

115. Two-thirds of the children using play areas were between five and ten, and the rest were divided fairly equally between the other age groups. Clearly the range and types of play areas included in our sample did not succeed in attracting large numbers of either the very young or the secondary age children. For pre-school children in particular we must consider what more can be done for their needs, as we know they are not allowed far from their own homes. Few parents seem to have adopted the approach of accompanying their young children themselves. On six of the estates for which this information was available, less than 2% of pre-school children seen in play areas were with adults. On most of the estates more under-fives played on doorstep locations such as access areas than in play areas (Figure 120). Again supervised play facilities may be the answer. These will be discussed in more detail in paragraphs 182-208.

120 Where the 0-4 age groups played on those estates which had play areas



Number = 8,419

* These percentages were adjusted to exclude the numbers of children observed on the estates which did not have locations in these categories. Therefore the total exceeds 100%.

116. The fact that never more than a fifth of a child's time was spent in play areas shows clearly that the designer's primary concern should be to plan estates with the other four-fifths of a child's outdoor leisure time in mind. Children play everywhere on an estate. It is unrealistic to suppose that play areas will prevent this entirely. However the Building Research Station research^{7,8} found that playgrounds did have some effect in attracting children away from roads and access areas, and we too found that where playgrounds were sparse or ill-equipped the under-fives played more on roads than in the play areas. The provision of play space should be seen in terms of adding to the child's enjoyment of his leisure time and his range of experience, providing a place where he can meet his friends, and helping to keep him away from the roads.

Standards for children's play space

117. A recently issued circular laid down standards for the provision of play space in all new local authority schemes.⁹ To assist in meeting the extra costs of these standards, local authorities are now eligible for special subsidisable allowances added to the Housing Cost Yardstick which sets the cost limit for a scheme.²⁸

118. The new standards differ from the previous recommended standards²⁵ in that they require play space to be equipped, and to be provided in housing schemes at all densities. In this they are reflecting some of the research findings discussed in this bulletin; namely that play space to be used and enjoyed by children should be equipped with conventional playground items; and that play space is needed at low as well as high densities. In high-density schemes where children have to live off the ground and therefore play outdoors less, it is hoped that play space will attract them outside. At low densities where it was found that children play more on roads and pavements than in gardens, well-equipped play areas can succeed in attracting children away from roads. And at all densities and in all types of schemes, parents express the need for adequate play facilities for their children.

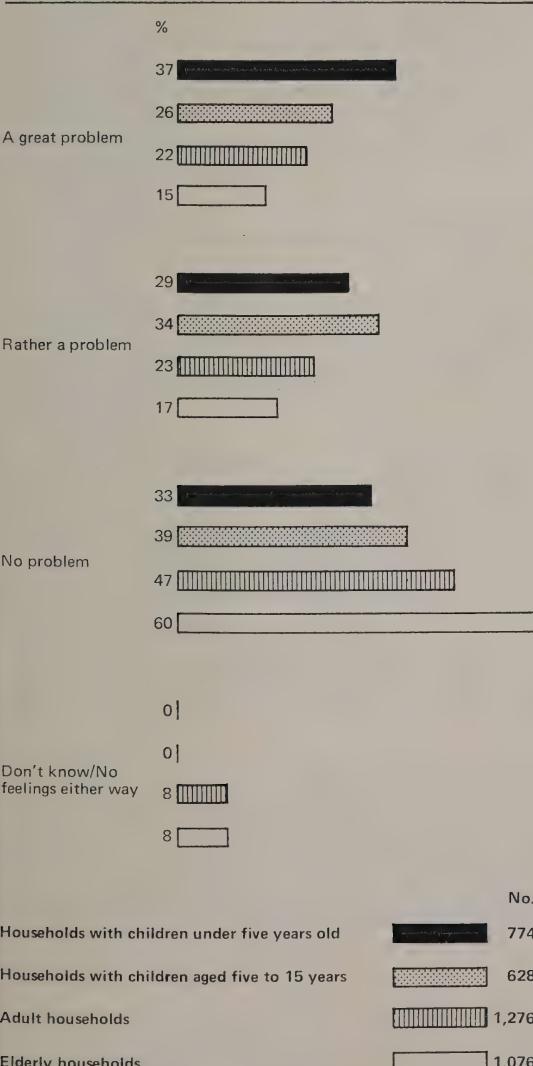
119. The amount of play space laid down in the standards, and the level of the allowances, are based on actual costs incurred on the more popular schemes examined and on the significant relationship between the proportion of children using play areas and the amount of play space provided. The decision to base the amount of play space on child bedspaces rather than all bedspaces in a scheme has resulted from the finding that this more accurately reflects the likely resident child population. At the same time it avoids the overprovision of play space on schemes where there are a large proportion of small dwellings suitable for childless households who are likely to be disturbed by children playing.

5 Adults' attitudes to play

The views of mothers

120. Two-thirds of all the mothers interviewed (paragraph 10) found their children's play either a 'great problem' or 'rather a problem' (Figure 121). There was considerable variation in attitudes within all types of building form, showing that as with other aspects^{13,14} the character and success of individual schemes is not necessarily determined by physical factors (Figure 122). However, it did seem that at all densities their children's play was less of a problem for mothers living in houses (Figure 123).*

121 Attitudes of the different household types to play



The fact that play was significantly less of a problem for mothers living at lower than at higher densities (Figure 124) was partly due to the prevalence of houses at these lower densities.

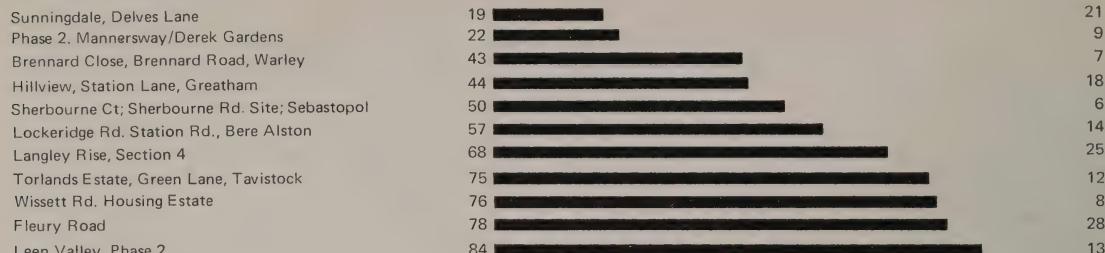
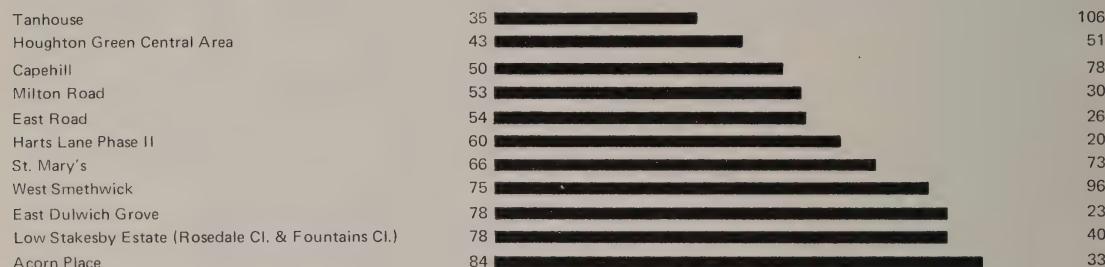
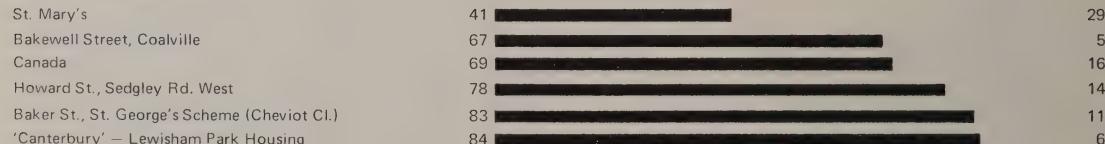
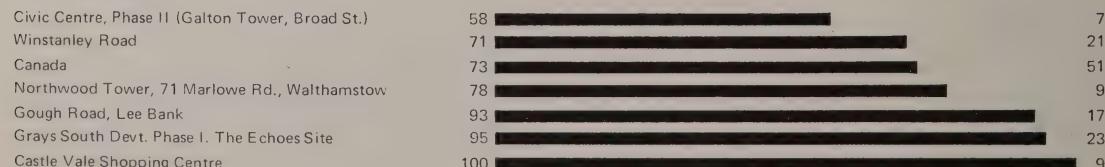
121. At densities of over 120 bspa, where it is more difficult to accommodate families in houses, no one type of building form emerged as more satisfactory than any other one, and dwellings on the tenth or higher floors were no more likely to produce problems than those between the first and the tenth. In general multi-storey schemes, except those with deck access, produced more problems than schemes with only houses. However, as there were only two schemes in the sample with deck access it would perhaps be rash to conclude that at very high densities mothers will find play less of a problem in deck-access schemes. The only conclusions that can be drawn are that not only do children play out more if they live on the ground, but their mothers too will find their children's play less of a problem.

122. Figure 125 shows the types of play problem experienced by mothers. Overwhelmingly the main cause of complaint was the lack of play facilities near at hand. 'There is nowhere for the children to play' was also a frequent grumble. Two-thirds of the mothers felt that the facilities on or near their own estate were unsatisfactory. When they were asked how things could be improved, far the greatest demand was for more and better play areas near to home (Figure 126). The Building Research Station research showed that until children are about nine or ten a great many of them are not allowed off the estate by themselves.^{7,8} Even in Stevenage where many of the areas are traffic-segregated, Holme and Massie found that almost two-fifths of the under-tens were not allowed out alone.³

123. However, one should avoid the temptation of concluding that providing play areas on estates would solve all the play problems mothers admit to. Where play facilities had been provided they did not significantly reduce the number of housewives finding play a problem though they were less likely to complain that the facilities were inadequate. In fact a wide range of seemingly relevant variables did not correlate with this issue.†

*Many fewer children lived in ground-floor flats than lived in houses or in flats above the ground. Although it did seem that children's play was more of a problem to mothers in ground-floor flats than in houses it is difficult to know if this would have been confirmed in a larger sample.

†The percentages of mothers finding play to be a 'great problem' or 'rather a problem' did not correlate with: (a) whether estate had play areas or not; (b) whether conventional equipment had been provided or not; (c) whether play provision was regarded as being satisfactory or not; (d) whether children were thought to be safe from traffic or not; (e) whether housewives suffered from 'nerves' in the last month or not; (f) whether housewives suffered from undue irritability or not.

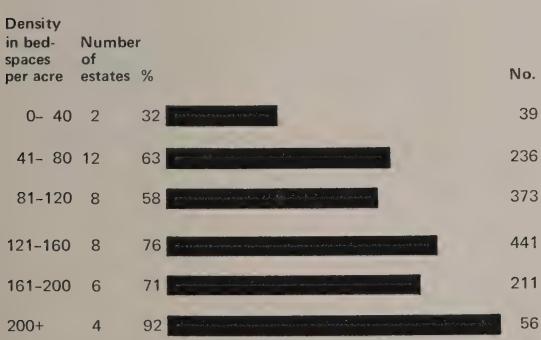
HOUSES AT BELOW 70 b s p a**HOUSES AT 70 b s p a AND ABOVE****DECK ACCESS****BALCONY ACCESS****WALK-UP BLOCKS****CORRIDOR BLOCKS****POINT BLOCKS**

123 Percentage of mothers finding play a problem, by building types



124. One possible explanation is that mothers were recording more than 'play' problems in answer to this question, and reflecting instead a whole range of difficulties of bringing up young children; problems which the provision of play facilities alone do not necessarily resolve. For instance, significantly more mothers with at least one child under five with older children were concerned that play was a 'great problem' (Figure 121). This perhaps reflects the greater strain of looking after pre-school children generally, and the need to keep a more watchful eye on them when playing.

124 Percentage of mothers finding play a problem, by density



125. Some of these anxieties could no doubt have been partly relieved by supervised play facilities (paragraphs 182-208). Although few mothers actually mentioned the need for supervision, this was implicit in some of the suggestions made to improve the situation (Figure 126). Sand-pits, sports fields, youth clubs etc., all need people to organise and maintain them. The presence of responsible adults would no doubt have helped to reassure the two-fifths of the mothers who felt their children were not safe from traffic when they played outside.

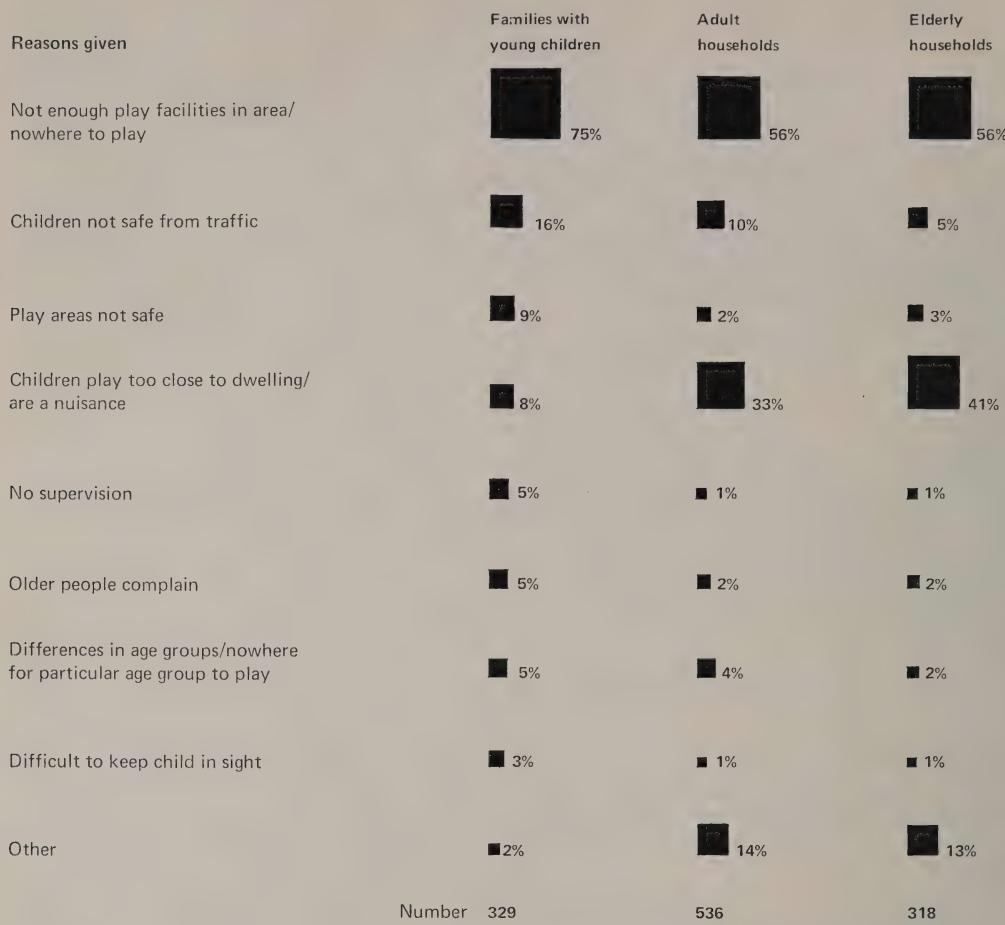
126. Besides traffic worries, researchers have also found that parents expressed anxiety about rough play and bullying, accidents and molestation.^{3,7} It is likely that these problems too would have been much alleviated by adult supervision.

The views of households without children

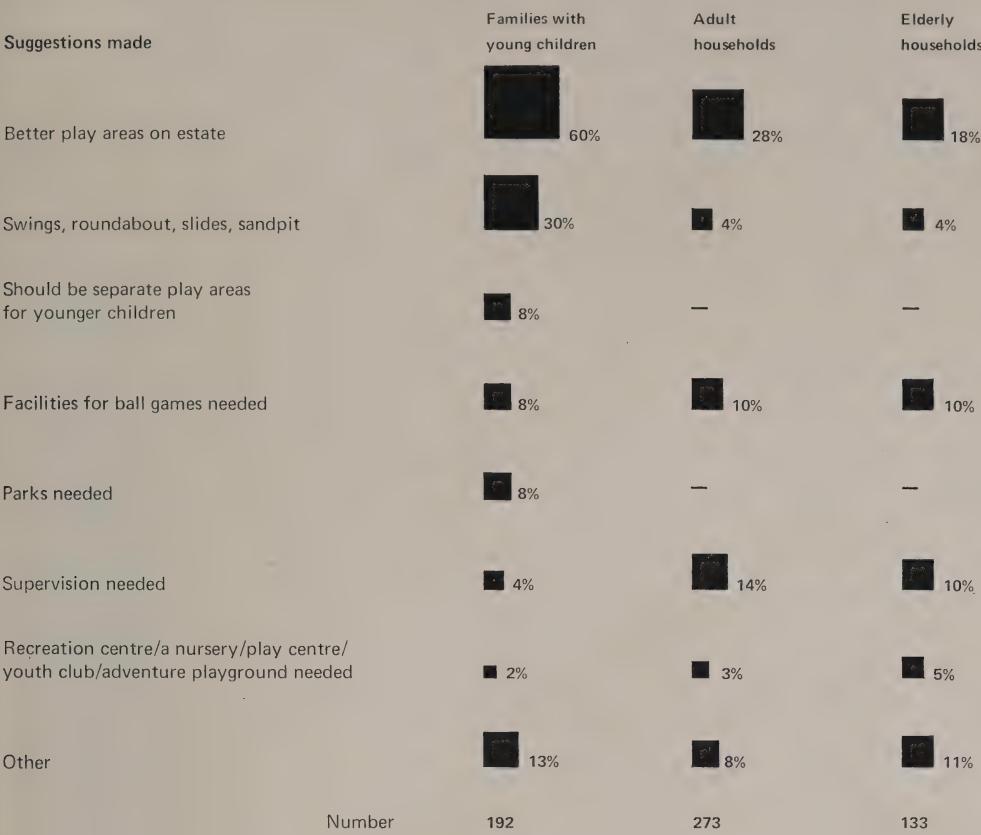
127. Although children's play was considerably more of a problem for residents who had children of their own, it is as well to remember that even for those without young children, play creates difficulties. Almost half the households without children under 16 (adult households) and a third of those where more than half of the family were over pensionable age (elderly households) felt children's play was a 'great problem' or 'rather a problem' (Figure 121).

128. On the whole the households without young children made the same types of complaint as the mothers. The lack of adequate facilities near at hand was the main grievance (Figure 125). This was partly a belief particularly held by elderly residents that with enough play areas of their own the children would be less nuisance. Two-fifths of the complaints of the elderly and a third of those of the adult households referred to the noise nuisance or damage caused by children when playing, especially when they played too close to the dwellings. Although some felt it was up to the parents or other adults to keep a closer and stricter watch over their offspring, many felt that better play facilities would have gone a long way to alleviate these problems (Figure 126). It is essential that in providing play areas they are not sited too close to the dwellings of households without children, otherwise the problems of noise will merely be aggravated (paragraph 105). As a high priority childless households demand privacy and quiet.^{13,14,15,16}

129. Like those with children, adult and elderly households found children's play more difficult to cope with where they lived on schemes built at very high rather than at low and medium densities. Yet as with all household types, there were considerable variations between different schemes built at the same density. The only clear pattern to emerge was that houses at densities below 40 bspa produced by far the fewest problems, and that houses built at high densities produced as many problems as other building forms. This would indicate that at high densities, unlike the mothers' problems many of which could be solved merely by living on or near the ground, the problems of households without children could actually be increased by living on the ground if this meant their living in close proximity to families with children. For those households, living in a multi-storey building could be preferable if it increased their chances of peace and quiet.



NB — Percentages do not add up to 100% as mothers could give several reasons for play problem.



NB — Percentages do not add up to 100% as mothers could give several suggestions for alleviating the play problem.

Chapter II

Play in older
areas



127 The steep cobbled roads and pavements in the older area of Oldham made very active games, particularly with wheeled toys, difficult for young children

The need to create play space

130. In providing for children's play in new housing areas the main need is for architects, planners and housing managers to plan for the requirements of the children at the design stage of new schemes and new communities. In this way it is possible from the outset to allocate resources and the right amount of space in the most suitable places.

131. In older areas making the right provision may be more difficult. Many of the older residential areas with 19th-century legacies of congestion and overcrowding and high population densities have the least public recreational space and specifically of play space per head of the population. As Holme and Massie showed,³ Southwark has 1.5 acres of public recreational space per thousand of the population, compared with 9.8 acres in Gloucester. In Bradford there are 2,300 children to every play space compared to 400 in Stevenage.

132. In renewal of older areas, ten or even 15 years may seem to a planner to be quite a short period. Improvements to the existing environment, such as new play space, may not seem worthwhile, but for a child growing up even five years is important. As Arvid Bengtsson, the Swedish playground expert, remarks, 'If we cannot give the child all that it has the right to claim, we must at least give it all we can reasonably provide. The possible future redevelopment of old towns by no means relieves us of responsibility for the present. There are many possibilities if we look around for inspiration! It is initiative, not opportunity, that is sometimes lacking.'²⁹

133. Though the overall proportion and pattern of physically active play for five to tens and 11 to 15s in the older area of Oldham was no different from that on the new housing estates, significantly fewer pre-school children were engaged in it (Figure 128). No doubt a contributing reason for this was that the steep cobbled roads and pavements made very active games, particularly with wheeled toys, difficult for young children (Figure 127). It must not be forgotten that all children irrespective of where they live need sufficient space for ball games, play with wheeled toys and other energetic pursuits. So there is an urgent need to create new open spaces for play and recreation and to make better use of existing ones in all older areas that are short of such spaces. Some suggestions are given below.

128 Pre-school children seen out who were engaged in physically active play

	%	No.
Low-rise estates	72	4,332
Medium-rise estates	61	4,694
Mixed-rise estates	63	2,751
Older area, Oldham	53	1,760

The older area of Oldham



129



130

129 and 130 The active play of the school-age children was similar to that on the new estates but fewer pre-school children were engaged in it

Waste and derelict land

134. In many of the inner areas of large cities, demolition, road schemes and industrial decay, have created large areas of waste ground. The older area of Oldham, less than a mile square, had over 50 derelict houses, and in one corner whole blocks had been cleared away. Almost a tenth of all observed play activities took place on waste areas (Figure 131), as many as in gardens and second in importance to roads.

131 Where the children played in the older area of Oldham



redevelopment³⁰ and one such area is now used as a football pitch. This method has cut the costs from the usual £500 per acre for such work to £60 per acre, thus removing the often-heard argument that high costs on temporary sites would not be warranted.

136. For young children, particularly the under-fives, a small playground with, say, a swing and a slide and seats for the mothers could well be located in a space left by the clearance of only one or two houses at the end of the terrace. In Exeter this has been done in Newtown improvement area, and is proving very successful (Figures 134 and 135). Now with the new Slum Clearance Subsidy³¹ there is a greater incentive for local authorities to make use of their cleared slum sites for such schemes.

137. On less temporary sites, the planners should be prepared to think ambitiously of their potential. In Stoke-on-Trent for example, spoil tips, clay workings and abandoned railways have been converted to recreational uses, including a forest park, playing fields and a sports stadium.³² In the Lower Swansea Valley a ten-acre derelict site is being used among other things for a covered games stadium and an ice rink.³³ More ambitiously still the Lee Valley Regional Park is slowly transforming huge areas to recreational uses in which playgrounds and playing fields are prominently featured.³⁴

138. Not all long-term reclamation schemes are dependent on such far-reaching planning decisions and large sites. In Lancashire the Pretoria Tip in Atherton was treated by planting trees in balls of soil, and is now widely used for children's play and for walking. Moreover, landscape architects like Mary Mitchell have shown how with imagination and foresight fairly small decaying landscapes can be transformed into pleasant recreational areas well-used by both children and adults (Figures 136 and 137). For instance at Nuneaton a silted muddy pond has become a large fishing lake and a dominant feature of Camp Hill playground.³⁵



132

132 and 133 At Oldham derelict houses and sites were used for play



133

135. As those areas are therefore likely to be used by children, they should be made varied and interesting, and free from obvious dangers. They should be made as attractive as possible to both children and adults. Even sites which are only going to be vacant for a short time can be made less of an eyesore by removing derelict houses, rubbish etc. and by grassing wherever possible. At Liverpool University the Botany Department has developed techniques for carrying out low cost grassing of sites awaiting



134



135

134 and 135 As part of an area improvement scheme at Newtown, Exeter, a small derelict site has been made into a playground



136



137

136 and 137 A derelict site at St Aidan's, Blackburn, transformed into a children's playground

The older area of Oldham

Over half of all play took place on roads and pavements



138



139

Play streets

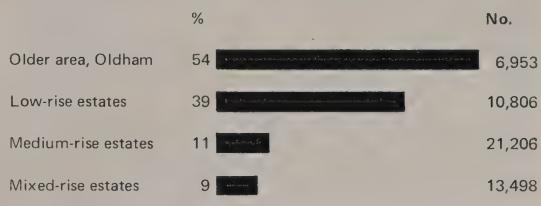
139. Totally* or partly† restricting traffic through pressure from residents or the efforts of community workers and planners is becoming more common as a means of creating play space that is at least safe from traffic. Already it is usual for children to play in such areas. In the older area of Oldham, over half of all activities took place on roads and pavements (Figures 138, 139, 143 and 144) – even more than the proportion on roads on the estates of new houses (Figure 142). They were by far the most important location for nearly all activities. As with the new areas of housing, the roads and pavements with the doorstep were the places for play closest to the dwellings. When adults were observed with children it was most likely to be on the doorstep.

140. Play streets should only be considered where there is no through traffic as it is almost impossible to prevent vehicles from taking short cuts while the children are playing. Care also needs to be taken that in diverting traffic away from the play street other areas and other children are not exposed to more traffic. A run-down area with low car ownership such as the area we studied in Oldham, where the roads were often steep and cobbled, is unlikely to expose children to many dangers. Traffic in Oldham was on the whole slight and slow-moving.



141

142 Percentage of children seen playing on roads and pavements



*The Town and Country Planning Act 1971³⁶ gives powers for closure of streets to vehicular traffic.

†In the Road Traffic Regulation Act 1967³⁷ (as amended by Part IX of Transport Act 1968³⁸), highway authorities are empowered to make an order prohibiting vehicles from using a road to be used as a children's playground.



140 and 141 A play street in Notting Hill, London – part of a summer play scheme

141. Moreover, as traffic is diverted from a particular road so will more children be attracted there. In the older area of Oldham two-thirds of all ball games took place in the road, and even a few extra children playing football in a narrow street of terraced houses make a good deal of noise. Experience from four general improvement areas has shown that, though families with young children may support proposals for new play areas, many residents are likely to oppose them unless they can feel there will not be too much noise and disturbance.³⁹ Play streets should only be considered where there are few adult and elderly families living in them.



143



144

143 and 144 The older area of Oldham. Cobbled roads and little traffic

Dual use of school facilities

142. Since the war the idea of the Village College, which was first developed in the 1940's by Henry Morris, Cambridgeshire Director of Education, has been taken up by local authorities in a variety of ways. The common aim has been to make school facilities available to the community out of school hours. In addition, in recent years local education authorities have been encouraged when embarking on new educational building schemes to pool capital resources with other local authorities and voluntary organisations so as to provide comprehensive recreational facilities, such as sports centres and swimming pools.⁴⁰

143. Because of their size secondary schools are normally the centres for such developments, but many successful schemes have been based on primary schools.⁴¹

144. It is not only in planning new schools that these ideas are feasible. Making existing school facilities such as playgrounds and playing fields more readily available, where this can be done under proper supervision and without excessive wear and tear of pitches, would go a long way towards filling the gaps in the neighbourhood provision of recreational facilities.

145. It is not only the outdoor space belonging to schools which should make a valuable contribution. As shown in paragraph 192 indoor space for play is badly needed by children of all ages. The Inner London Education Authority for example, has for many years used its schools for youth clubs, holiday centres and after-school play centres. On the Warwick Estate, the ILEA ran a play centre and junior club in one of the primary schools every afternoon and evening after school (paragraphs 176 and 177). In spite of operating in cramped Dickensian conditions, these play schemes allowed a wide range of activities well appreciated by the children we interviewed. Of children between seven and 11 who attended the play centre, most lived nearby or actually attended the school in which it was held.

146. One of the reasons that so many children did not go to the play centre was that they did not know about it. This was especially so for children who did not live on the estate or attend the school. Unless *all* schools in an area are going to make out-of-hours provision for play, those that do should publicise this as much as they can, perhaps by circulating to all the other schools in the neighbourhood the range of facilities available and the hours of opening. At present ILEA leaves it to the schools concerned to publicise their play centres and supplies head teachers with lists of current schemes. But the authority is continually reviewing its policy on publicity.

Public parks and recreation grounds

147. From the children interviewed, visiting parks and recreation grounds was a favourite occupation. Most of them appreciated such facilities as play equipment, boating lakes and ball-game areas in parks. A recent survey of the use of open spaces in London indeed showed that young children are frequent visitors to parks.⁴² Much can be done to make parks and recreation grounds more attractive to children and to make better use of the space.

148. Lady Allen, in describing the role of the Play Parks run by the Greater London Council (see also Appendix III), said they were a 'means of extending play opportunities into the hitherto "sacred land" of the public parks'.⁴³ In the local park about a quarter of a mile from Gloucester Street the children were allowed to play on the grass on Whit Mondays only! Without doubt there are many parks which could spare a corner away from the flower beds and the sitting-out areas to be used as play areas, whether they are used to provide conventionally equipped playgrounds or to echo the success of the Play Parks in widening the range of play activities.

149. Alexandra Park in Oldham, about which the children spoke with such enthusiasm, is a good example of how in a park of modest size and amenities the Council has gone out of its way to cater for the needs of young children (Figures 145 to 150). As Figure 148 shows, the paddling pool is much used in hot weather. There is a boating and fishing lake, a small zoo and a wide range of conventional equipment throughout the park.



145



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150. The observations at the Emslie Horniman Pleasance Recreation Ground in Kensal Town, at that time run by the Greater London Council, showed how even on a small site (3.4 acres) a valuable amenity for the area can be provided. On the nine days during which observations took place an average of about 300 children attended the recreation ground each day. The ornamental lily pond and a planted sitting-out area provided an attraction for the mothers. A third of all pre-school-age children seen in the recreation ground were with adults compared with only a twentieth on the new housing estates. In a rather depressing area of high-density housing estates, slum dwellings and acres of waste ground cleared for redevelopment, this small recreation ground provided play equipment for the younger children and space for the older ones to play ball as well as a pleasant place for adults to sit (Figures 151, 153 and 154).

151. During part of the observation period a play scheme was organised at the recreation ground. On average there were 11 or 12 voluntary helpers a day, who organised a wide variety of activities. Although the supervised play scheme did not succeed in attracting significantly more children to the recreation ground, it did disperse the children (Figure 152). A quarter of the supervised activities took place on a previously unused area of waste ground (Figures 155 and 156). After the play scheme finished it again became unused.

152. Where there is a scarcity of play space, it may be worth the Council considering the cost of providing permanent, salaried playleaders to make better use of existing sites in areas where it is virtually impossible to create more play space.

The Emslie Horniman Pleasance Recreation Ground

Here there was play equipment for the younger children and space for the older ones to play ball, as well as a pleasant place for adults to sit



151

152 Where the children played in the Emslie Horniman Pleasance Recreation Ground

Locations	Percentage before supervision	Percentage during supervision	Percentage after supervision
Play equipment	■ 42%	■ 22%	■ 28%
Grass	■ 28%	■ 16%	■ 39%
Pond area	■ 8%	■ 15%	■ 10%
Waste areas	■ 3%	■ 27%	■ 2%
Gravel area	■ 13%	■ 6%	■ 11%
Shelters	■ 2%	■ 11%	■ 3%
Paths	■ 3%	■ 1%	■ 3%
Hard surface	■ 1%	■ 2%	■ 3%
Walls, railings, fences	—	—	■ 1%
Total	100%	100%	100%
Number	682	746	673



153



154



155

155 and 156 Waste ground next to the Emslie Horniman Pleasance Recreation Ground was successfully used for a play scheme



156

Space under motorways

153. As part of the Notting Hill Summer Play Project, play schemes have been set up in space under the Westway Motorway every summer since 1968 (Figures 157 to 159). These have been very successful, and have provided in one of the most congested areas of North Kensington large areas of safe play space suitable for play in all weathers. The schemes have been so successful that in 1971 an adventure playground was set up permanently beneath part of the motorway.

154. This relied on adult supervision for its success and showed that ingenious ways can be found of using all available areas for children's play needs. In the absence of the ideal, children will enjoy and put to good use second-best alternatives.

Safe pedestrian access to play space

155. There is no doubt that many existing playgrounds could be more used if safe pedestrian access was provided across major roads. The location of playgrounds, an inheritance maybe from Victorian times, may now bear little relation to new building and new roads, and the present child population may find it extremely difficult to get to the play spaces.

156. Not only do children make most use of playgrounds within a very short distance from home,³ but they are most likely to visit them if they are not cut off by busy roads and insufficient pedestrian crossings. A study of an adventure playground in Stevenage showed that children who did not have to cross busy roads came from further afield to visit it.⁴⁴ This is confirmed by our own findings of children attending the Warwick Estate Adventure Playground. Children, particularly small ones, generally cross major roads with parents,³ yet only two-fifths of children visiting playgrounds are actually accompanied by adults. It seems highly probable that there are many who never or rarely use playgrounds or recreational play spaces if they are cut off by major roads.

The Housing Act 1969 and the Urban Aid Programme

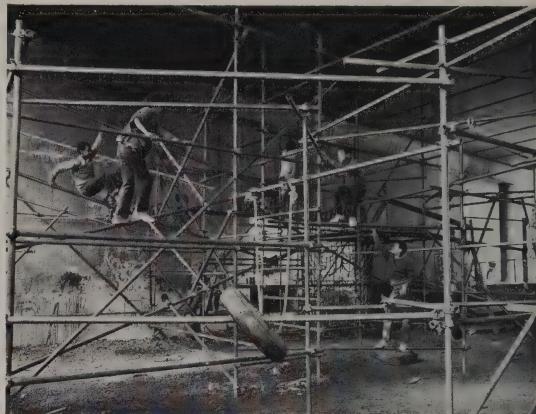
157. The suggestions made here for creating more recreational space for children's play have represented measures of environmental improvement, however small, in areas of existing housing. The Housing Act 1969⁴⁵ and the Urban Aid Programme⁴⁶ are two examples of government measures for aiding such improvements.

158. The Housing Act 1969 provides for improvements carried out in a general improvement area to qualify for grants from central government. Residents are encouraged to put forward their own priorities for improvements which can then be incorporated into the area proposals. Already it is becoming clear that in some areas improving facilities for children's play has been recognised as a priority. For example, in the Woodland Walk and Tyler Street Improvement Area in Greenwich an adventure playground was one of the main proposals put forward by the Residents' Association. The play area at Exeter Newtown was also added to the scheme as a result of a survey of residents' attitudes to environmental proposals which showed that many residents considered additional play space was needed.

159. The Urban Aid Programme, set up under the Local Government Grants (Social Need) Act 1969,⁴⁷ aims to encourage additional expenditure by local authorities on education, health and welfare services in areas of special social needs; Exchequer grant at a rate of 75% is paid on approved schemes. The scope of the Programme is very wide; so far as children's play facilities are

The Notting Hill Summer Project

This play scheme under the Westway Motorway was originally run during school holidays. It has proved to be so successful that it now operates all year round



157



158



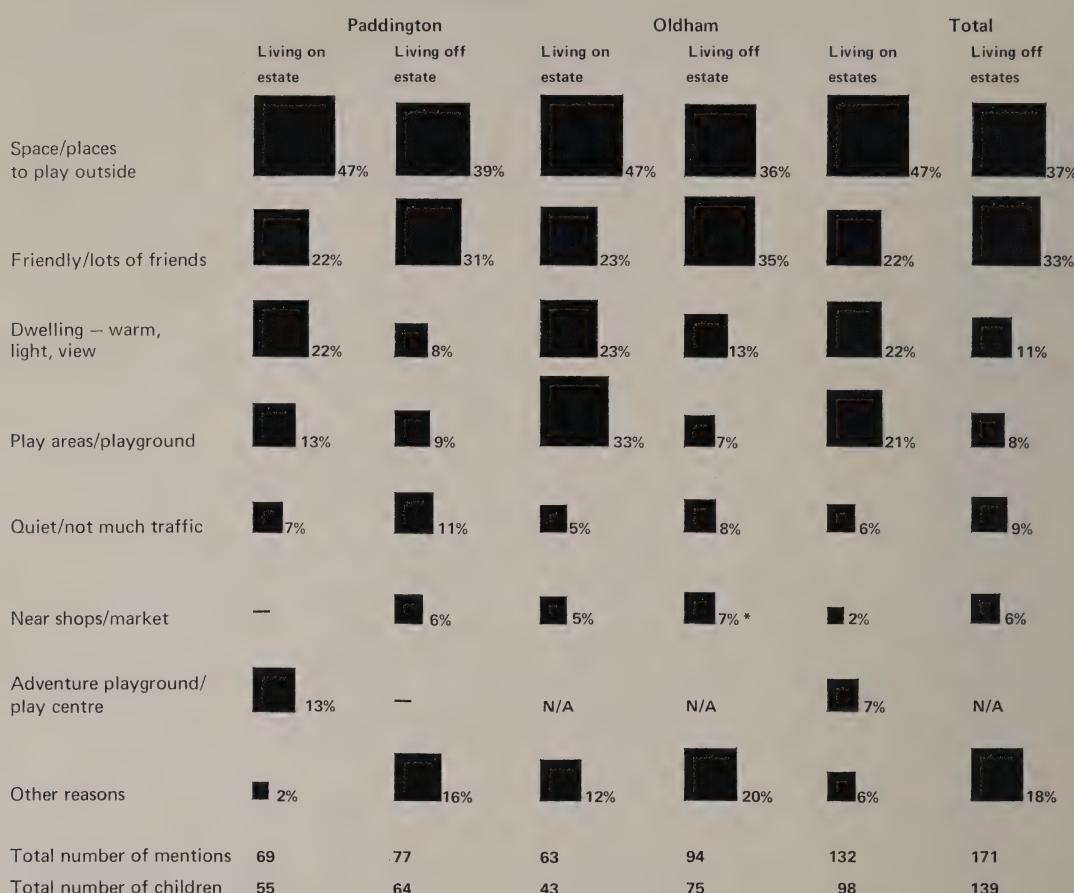
159

concerned it includes, for example, grants to voluntary play groups and adventure playgrounds, including staff and advisers; the provision or extension of playgrounds and open spaces; and grants to holiday play schemes of the kind mentioned in paragraph 204 below. It is interesting to see that money available under the Urban Programme is being spent on trying to correct, through play, some of the disadvantages in which some children are placed by virtue of their social and physical surroundings.

160. However, the demand and need for improved play facilities is by no means confined to general improvement and deprived areas, where residents and councils already think in terms of improving the environment and attempting to make-good areas of physical and social deprivation. In recent research concerned with a Family Advice Service Centre on a housing estate built in 1939, one of the problems about which tenants generally were most vociferous was lack of play space.⁴⁸ But for the presence of the social worker, the discontent would not have been translated into a complaint to the Council nor into subsequent practical action. There must be many such areas, not identified as problem areas, where local authorities might think of means of creating more open spaces for children in some of the ways outlined earlier. As so much of children's play is spontaneous, short-term, and takes place near to home, improvements for play should be looked at street by street.

Chapter III

The children's choices



* This percentage is deflated as there were no Adventure Playgrounds at Oldham.

Reasons for interviewing children

161. As adults we make decisions for children for the good of their health, education or recreation. This does not always mean that these decisions reflect the children's own desires or that they will like or appreciate our decisions. This is largely unavoidable, but if children are to get the most out of their play some attempt should be made to find out what they want.

162. One way of doing this is by watching children at play since this tells what children do and where, as opposed to what their parents think or say they do. But observing children can only tell us what children are actually doing within a limited geographical area. It tells us nothing about why they are playing there, or their preferences. So we decided to interview a sample of children in two of the observation areas - Oldham and Paddington. These areas were chosen for two reasons. First, in both of them, within the catchment areas of the local schools there were both new local authority estates and slum dwellings awaiting clearance and renewal. We hoped to see whether the play habits and expectations of children living in the slum dwellings were any different from those of children living on the new estates where provision was made for safe play; and also whether the children from slum dwellings made use of the new estates for play. Secondly, we wished to see what use the Paddington school children made of some of the supervised facilities available on the Warwick Estate - the adventure playground and the play centre - and to ask what they thought of them.

163. One hundred and thirty children from Oldham and 125 from Paddington between seven and 11 were selected at random from three primary schools in the areas immediately surrounding the estates. Each child was interviewed separately and in confidence, the interviewer using a prepared questionnaire. Response to all questions was high; even the youngest children answered fully. There was a high level of consistency in all that the children said, the reliability of which was backed by the observation data. There was also a high degree of comparability in the children's responses in the two areas, which suggests that the findings are fairly generally applicable to other children of the same age, living in similar social and physical environments.

The children's preferences

164. One of the interesting points to emerge from the interview was that young children care as much about their surroundings as adults. A fifth of the Oldham school children and two-fifths of those in Paddington, though they generally liked living where they did, qualified their answers by mentioning things they disliked. Poor housing, and living on busy roads, are just as likely to be noticed by children as adults, and like adults they too will appreciate modern homes, quiet streets and friendly neighbours. Play facilities were mentioned spontaneously by just under half of the Paddington school children and just over two-fifths at Oldham as something they liked about where they lived (Figure 160).

165. In both areas, significantly more children mentioned facilities and places for play as a reason for satisfaction if they lived on the new estate than if they lived in an older housing area. Play areas were specifically mentioned by a third of the children living on the St Mary's estate, which confirms our earlier findings that play areas with conventional equipment are popular with children (Figure 163). The play areas on Warwick Estate, though plentiful, were mainly equipped with static concrete structures, and only a tenth of the children thought they deserved a special mention (Figure 164). Their preferences were further revealed in answers to questions about their 'really favourite place to go' and favourite games. Going to the parks and playing with the swings and slides or playing ball were the clear favourites in both



161 Oldham



162 Paddington

161 and 162 The children were critical of poor housing conditions

areas, representing about half of the stated favourites. For children living on the St Mary's estate the largest play area took over to a great extent the role of the local parks as it had much the same sort of equipment and was referred to by the children as playing in the 'park' (Figure 167). The only activity which the main park provided and the estate did not and which the children much enjoyed was boating on the lake. Ball games were a favourite activity, particularly football. These were well catered for on the Warwick Estate, and at Oldham, on 'The Edge' a large area of waste ground. Children also played ball on a works playing field on 'The Edge' which was meant to be out-of-bounds (Figure 170). However, for children living in Paddington and not on the Warwick Estate playing ball mainly took place in the local parks, such as Kensington Gardens and the Paddington Recreation Gardens, though the children freely admitted to playing ball 'round the streets'.

166. The children who played on Oldham Edge seemed to have had more scope for imaginative activities than the other children. Playing there represented a measure of freedom not experienced in other places; 'up on the Edge nobody tells us off - plenty of places to play'. Although such places are not round every corner there must be many areas which if cleared, grassed and made safe would provide for the children the same sort of unrestricted environment as Oldham Edge for physical, vigorous play and giving rein to the imagination.



163 ST MARY'S

The conventional equipment here was well appreciated by the children



164 WARWICK

Few children thought the static concrete structures deserved special mention



165

165 and 166 ALEXANDRA PARK, OLDHAM

The children's favourite activities were going to parks to play with swings and slides or to play ball games



166



167 ST MARY'S

The children referred to the main play area here as 'The Park'



168 ALEXANDRA PARK, OLDHAM
Boating on the lake was particularly enjoyed by the children



169 WARWICK
A conventional ball-games area



170 OLDHAM EDGE
A works playing field was used for ball games



171 PADDINGTON

The children here freely admitted to playing ball 'round the streets'

167. A quarter of the children interviewed in Paddington and a seventh in Oldham mentioned traditional games like tig and hide-and-seek which could be and were played anywhere out of doors. Interesting variations were noted; for instance, in Paddington a game commonly known as follow-my-leader was called 'run outs'. This less usual version involved following the leader for a bus ride, and running through large department stores in the West End grabbing items from the counters along the way. The Opies⁴⁹ observe that after a certain age children may be reluctant to admit that they like playing games. Only in one or two instances was this the case with the children interviewed. Up to the age of 11 at least, most children spent a good proportion of their time in traditional games handed down from generation to generation and they spoke with enthusiasm of such things as 'in and out of the dusty bluebells', 'pom poms' and 'ping pong poison'.

After-school activities

168. To get some idea of what the children were doing when they were not outside, and what proportion of their time was spent indoors, they were asked what they normally did when they came home from school, what they had done the night before and what they would do that particular evening. No mention was made of play specifically, in order to learn as much as possible about the child's total activities.

169. In both areas most children spent their time after school playing, but some children spent time on household chores. Other studies confirm this and indicate that this increases with age, particularly for girls.^{3,7,8,50} A fifth of the Oldham children and a quarter of the Paddington ones mentioned some task like looking after the baby or getting the tea which had to be done apart from playing. A very few children in each area did not mention any play activities at all but had a hard evening routine of getting the tea, looking after brothers and sisters and cleaning the house. It is interesting to note, and this is discussed in paragraphs 178-181, that all of these six children came from troubled homes and their head teachers described them as being from 'problem families'.



172



173

172 and 173 OLDHAM EDGE

Children enjoyed the freedom of roaming 'The Edge'

170. Although the interviewing took place in November, half of the children in Oldham and a quarter in Paddington, where it snowed during the interviewing period, played outdoors for some of the time. It is unlikely that these outdoor activities such as tig, hide-and-seek and ball games took place far from home, sandwiched as they were between the few hours remaining between coming home from school, having tea, going to bed and indoor activities which took up a greater proportion of the children's time. In fact one can probably assume that on weekdays at least, when children are not observed outside, they are indoors rather than outdoors further away.

171. The Building Research Station study⁷ found that, even during the summer holidays, children frequently mentioned indoor pursuits as the way their time was spent 'yesterday'; and in Holme and Massie's study³ of children's activities in Southwark and Stevenage, seven of the eight activities engaged in by more than half of the children were basically indoor and non-participant ones; these were:

WATCHING TELEVISION

LISTENING TO THE RADIO

LOOKING AT COMICS

DRAWING WITH A PENCIL

READING BOOKS

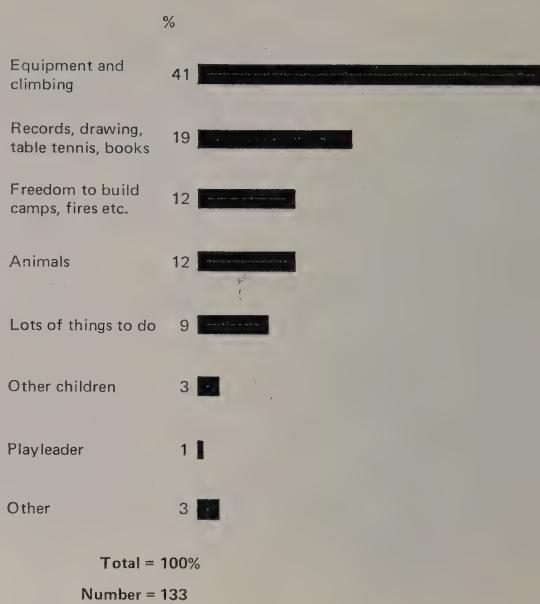
READING NEWSPAPERS

READING JOKES OR FUNNY SAYINGS

As with the children in these studies, watching television was a major pastime with the Paddington and Oldham children and mentioned by over four-fifths of them.

172. The pattern which emerged from the children's account of activities was thus one of almost continuous play, but divided sporadically between inside and outside the house. Yet the fact that even in snowy winter weather a quarter of the children played outside after school when it was already getting dark shows that outside play is an important part of their evening activities.

174 What the children liked about the Warwick Estate Adventure Playground



The Warwick Estate Adventure Playground

The children liked climbing on the wooden structures, in many cases built by themselves



The adventure playground

173. One in ten of children living on the Warwick Estate and one in 50 of children living nearby mentioned spontaneously the Warwick Estate Adventure Playground as a favourite place to play. However, when the children were asked specifically whether they went to the playground two-thirds of those who lived on the estate said they did. Less than a third who lived off the estate visited the playground, and not very regularly, and mainly during school holidays. The main reasons for not going were that it was too far and too dangerous because of the traffic; again showing how very localised play facilities need to be in order to be well-used. To the children the adventure playground was not a neighbourhood facility which they would make a special effort to visit like the parks, but a home-based estate playground, mainly used by those near at hand.

174. Using equipment and climbing ranked as the most popular activities at the adventure playground (Figure 174). The equipment was not the purpose-built conventional variety but large wooden structures built in many cases by the children themselves (Figures 175-177). Over a tenth of the children enjoyed the freedom to make things, build camps and make fires and another tenth said there was 'lots to do'. A fifth of what the children did was indoor pursuits such as playing records, table tennis, drawing and painting.

175. The main criticisms of the playground were that it was dangerous, that the other children were bossy, and that it was dirty and muddy: a few children wished there were fewer restrictions. These criticisms give an interesting insight into children's preferences. Getting dirty and meeting dangers are not liked or needed by all children. Wherever possible, however, play leaders will try to reconcile the personality demands of different children.



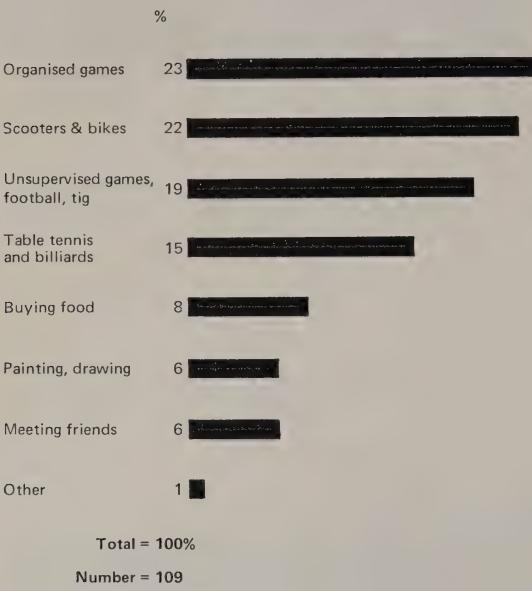
177



The play centre

176. The play centre on Warwick, like the adventure playground, was most used by children living nearby. Half of the children living on the estate went there, as opposed to a quarter living in the surrounding area, who attended irregularly. The most popular activities were the organised games and playing with the scooters and bikes provided by the centre (Figure 178); indoor activities – including painting, drawing, buying food and playing table tennis and billiards – accounted for over a quarter of the favourite ones.

178 What the children liked about the play centre on the Warwick Estate



180. Four out of five children in Paddington and five out of eight at Oldham who could think of nothing they liked about living where they did came from 'abnormal' home backgrounds. In asking about favourite places for play and favourite activities, it became evident that a few children spent little time playing with others, had few friends and played outdoors less than other children. Those with difficult backgrounds spent a higher proportion of their time doing household chores than other children, and three children from each area spent all their time after school in housework. A seven-year-old boy in Oldham described his evening as 'I go into the back and play with dad's lorry, light a fire, clean up house, have a cup of coffee, go and make beds, go and meet me mum, go to dad's work, get money, bring him chips. At 11 o'clock get him his supper.' A West Indian girl talked of sweeping the bedrooms and stairs, making something for her brother and sisters to eat and then washing the plates.

181. Although our evidence is limited it does appear that social background is a major determinant of the extent to which play facilities will be used. This raises the question of what type of play provision could be relevant to such children. This is discussed further in the next Chapter.

177. The main reasons for not going to the play centre were much the same as those for not going to the adventure playground, namely that it was too far, they weren't allowed to go, or the other children were too rough. A higher proportion on the other hand said they didn't know of it (paragraph 146).

Effects of home background on play habits

178. It is difficult to judge whether the quality of play differed according to where the child lived. Certainly the impression gained by the interviewers was that most children's enjoyment of their leisure was unaffected by whether they lived on a new estate with amenities for play or in an older slum area. Possibly the children in the slum area had to make a special effort to seek out opportunities for recreation.

179. The difference that did emerge however was between children from 'normal' or 'abnormal' backgrounds. In Oldham and Paddington an attempt was made to assess the home circumstances of the children by getting the head teachers to fill in a short questionnaire. Details such as the number of children in the family, parental interest in school work, whether the child had free school meals, whether the child had one or both parents, and his school attainment, did give us a picture, albeit crude, of a small proportion of children in both areas who came from difficult or unhappy homes.

Chapter IV

Supervised play

1 Why supervised play?

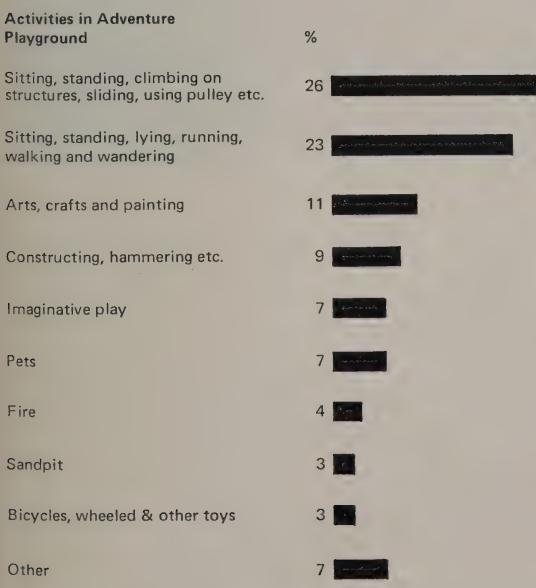
182. Appendix III lists the main types of supervised play facilities available for children of all ages. This includes some which are not specifically for play, e.g. nursery schools and day nurseries. They have been included because some of their activities are play-orientated.

183. Supervised play introduces some children to a whole new range of activities, such as opportunities to paint and draw, play with clay, pastry and water, read, play with animals – some of the things which experts agree are so important for the child's healthy development, and essential for learning.

184. Observations at the Emslie Horniman Pleasance Recreation Ground found that, though the supervision scheme did not attract significantly more or different children to the park than used it in normal circumstances, it did succeed in fulfilling one of the aims of supervision schemes, namely diversifying the activities (Figure 180). Just under a third of the children were engaged in activities which were not available in the park except for the duration of the play scheme. These included building and climbing on play structures, lighting fires, painting, sewing, dressing up and play-acting (Figures 181 to 184).

185. At least a third of the activities at the Warwick Estate Adventure Playground (Figures 185 to 188) relied on the presence of a supervisor or indoor premises (Figure 179). Besides those observed at the recreation ground they also included playing records, playing with hamsters and rabbits and playing in the sand-pit.

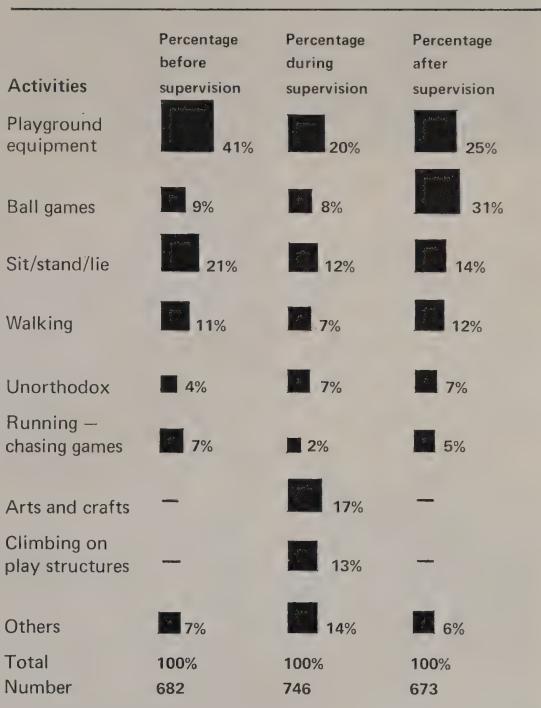
179 The children's activities at the Warwick Estate Adventure Playground



Total = 100%

Number = 550

180 The children's activities at the Emslie Horniman Pleasance Recreation Ground





181



183



182

The Emslie Horniman Pleasance Recreation Ground
The children enjoyed a wide range of play experiences whilst the
holiday scheme was in operation



184



185



187



186



188

The Warwick Estate Adventure Playground
There was wide scope for play activities all the year round, aided by the presence of a supervisor

Supervised play for the under-fives

186. Though children of all ages and both sexes need the opportunities described above, it is crucial for the under-fives. It is during these years that the most rapid physical and mental growth is taking place. Half a child's intellectual growth will have been established by the fourth year.⁵¹ It is during these years that the child needs 'rich opportunities for play and for language development'.⁵²

187. Many researchers have found that an insufficient mastery of language during the pre-school years will put the child at a disadvantage for the rest of his life.^{53,54,55,56} It may well be that the verbal *rapport* which articulate adults have with children, particularly of pre-school age, is as important for their intellectual development as the equipment provided or the companions. These opportunities will perhaps best be provided in full-time nursery schools, though part-time play groups make an important contribution.

Some of the activities available at the One o'clock Club for the under-fives on the Alton Estate, Roehampton, London Borough of Wandsworth (Figures 189 to 194)



More One o'clock Club activities



190



191



192



193



194

Children from disadvantaged homes

188. Although supervised facilities will not of themselves solve all the problems of children from disadvantaged homes, many of them are in particular need of the individual attention provided by such facilities. It has been estimated that at least 15% of all children are socially disadvantaged in some way: children from culturally deprived, inadequate or delinquent backgrounds; children with only one parent; children who are physically or mentally handicapped; children who have physical or mental illness in the family; children living in poor housing conditions; children who are restricted at home because one or both parents are on shift work and need to sleep during the day.^{57,58}

189. However, though the first consideration should be for such children, we should not lose sight of the fact that it is not only the children from poor and deprived homes who may lack adequate opportunities for play. Many parents do not realise the importance of play or know how to play with their young children.^{18,59} And even children fortunate to have enough opportunities within their homes gain enormous benefits from sharing their play with other children. Whatever else, play is a social activity.

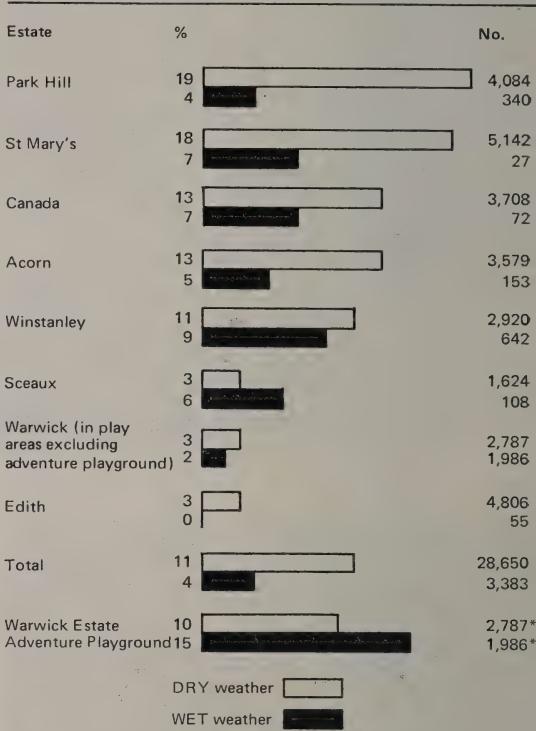
190. For children of all ages adult leadership can provide a relaxed creative atmosphere in which a child can develop his interests and learn to relate to other children. For the child from a normal home this will be the 'bonus' resulting from attending a good supervised play scheme. For children from disadvantaged homes this may be their only opportunity before reaching compulsory school age of learning even the basic social and educational skills which are essential for subsequent scholastic progress.⁵⁵ However, it cannot be assumed that all children will readily benefit and enjoy using the facilities. Those experienced in running play schemes in deprived areas say that some children have to be taught *how* to play first. As we have already seen, children with difficult home backgrounds spent a higher proportion of their spare time doing household chores than other children.

191. From interviewing children it seemed that West Indian ones spent little time playing with others, had few friends and played outdoors less. Without closer study it would be impossible to say whether their own culture was providing them with compensations not readily detected in one interview. Few of them had housing conditions suitable for unrestricted indoor activities, and certainly significantly fewer West Indian children had been taken to local places of interest such as the swimming baths and the zoo or away for a holiday than their white counterparts. We cannot say whether children from other ethnic groups are in a similar situation. This raises the question of whether special efforts have to be made to provide children who have different cultural backgrounds and who intend to settle in this country with special opportunities for play and recreation. In the last few years multi-racial playgroups have sprung up with this aim in mind, and there are many local examples of how, under skilled supervision, children and mothers of different cultures can learn about each other in a relaxed play atmosphere.⁶⁰

Indoor play

192. The fact that supervision makes possible the use of indoor play premises is extremely important. Many essential activities, such as painting, are not feasible out of doors for most of the year. Apart from the Warwick Estate Adventure Playground none of the play areas studied provided facilities for wet-weather play, even though in the areas studied there are between 160 to 180 days a year when there is some rain; and this does not take into account exceptionally cold or foggy days which a number of mothers might also reasonably say were unsuitable for outside play. Not unexpectedly the children seen in the play areas sharply decreased in wet weather, whereas at the Adventure Playground they increased from 10% to 15% (Figure 197).

197 Percentage of children in play areas in dry and in wet weather



* Figures relate to total number of children observed on Warwick Estate



195 An adventure playground on the Alton Estate

195 and 196 Indoor facilities increased the range of play activities



196 Warwick Estate Adventure Playground

Adults' worries about play

193. For the mothers of young children, particularly those under 11, supervised play schemes can provide much needed reassurance. The interviews which we and others^{3,7} have carried out with mothers show that their main worries about their children when they play outside are the dangers of traffic, rough play, accidents, and bullying by older children and molestation.

194. It can be argued that these worries could be largely alleviated if mothers accompanied their children when they played outside. Besides not always being practicable, this solution does not face the reality of the way children are brought up today. Less than a tenth of the under-11s were seen with adults when playing outside (Figure 23). It is also worrying that so many young children played on or by the roads even where alternative and more suitable spaces such as gardens and/or play areas were available to them. On the estates of houses with conventional road layouts two-fifths of all outdoor activities for all age groups took place on roads and adjoining pavements (paragraphs 48-54).

195. There is of course no guarantee that the presence of supervisors will cut down the incidence of rough play and older children bullying younger ones. One of the reasons given by junior school-age children for not attending the Warwick Estate Adventure Playground was the presence of rough and bullying children. The successful and sympathetic playleader who succeeds in attracting children from deprived backgrounds to the play scheme and winning their confidence, may find a disproportionate number of children attending with behavioural difficulties, manifested in excessive aggression and bullying. In the younger age groups where behavioural difficulties may take a less overt form the adults can prevent them from hurting each other. It is more of a problem for the older age group. Here, there is certainly a need for more qualified staff and additional helpers. This will encourage them to stay with a scheme for some time, thus giving continuity to the children. We would suggest that this is a problem which should be looked at and studied further.

196. Holme and Massie found that a fifth of the mothers interviewed worried about their children being molested by strangers.³ There is a general if unspoken fear that young children are ever increasingly at the mercy of 'sex maniacs'. Statistics⁶¹ however show no significant increase in the number of sexual assaults on children, and recent studies^{62,63} indicate that children are at risk not so much from strangers at large as from people from within the family circle. There is also an indication that it is a few disturbed children who subconsciously or otherwise seek out such attentions. Undoubtedly though, reassurance for mothers will not come from the cold statistics.

197. Supervised play schemes may provide mothers with their only chance to have some time to themselves. Relatives very often live too far away to offer much practical help. We found that mothers more often thought children's play to be a problem when there were fewer relatives living nearby.*

198. Supervised play schemes, besides satisfying the needs of mothers, can also help to fulfil the demands of those without children. This is particularly important on large high-density schemes, where many people are forced to live at very close quarters to each other. Here the disappearance from view for a few hours a day of many of the young children to play can undoubtedly help to reduce stresses and strains between tenants. One of the problems which mothers frequently mention is the complaints other people have about their children. Our studies have shown that adult and elderly households are highly disturbed by the noise and nuisance of young children and the mess and often damage they can cause, and vandalism is frequently blamed on children.^{13,14,15,16}

199. Damage is often incidental to play and what often passes as wanton destruction (or vandalism) is no such thing. However, it is worth quoting from a report of one supervised play scheme that has claimed to reduce vandalism: 'The school next door reports that this summer holiday, for the first time in their history, there were no windows broken nor other damage nor nuisance from children entering and playing in the school grounds. The local Stevenage Development Corporation Estate Office reports a drop in complaints from householders in the area, with regard to ball games in the garage forecourts etc. Several parents of children who hovered on the edge of serious trouble have expressed their appreciation of a summer without complaints from irate neighbours, schoolmasters and police, because their youngsters have been actively engaged in the playground and out of trouble. . . . The police cannot give us figures for this particular area but tell us there have apparently been fewer *reports* to them of vandalism and nuisance attributable to children and there have certainly been fewer *cases* of damage attributable to children. On one thing our informant was quite definite - during the same period last year, before the playground opened, they received constant complaints from Hyde and Burwell Road shopping areas nearby, of children causing undue noise and nuisance. This year they have received *no* complaints of this sort, from these two shopping areas at all'.⁶⁴

200. Further research should be undertaken to establish whether the cost of supervision is more than offset by a reduction in vandalism.

*Questions about relatives were only asked in interviews with tenants on Edith Avenue, The Bonamy, Curnock Street and Royal College Street estates.

2 Some implications of supervised play schemes

Variety of provision

201. To ensure that *all* children have opportunities for constructive and developmental play no one type of supervised play facility is enough. A range is clearly needed. Obviously for some categories of children, e.g. children whose mothers have to work full time, the only play facilities that will meet their needs are those which are included in full day care all the year round. For children from culturally deprived or delinquent backgrounds the most suitable play facilities may be those where the emphasis is on relationships. For some children, such as only children, a playgroup which meets two hours a day a few days a week may be all that is needed.

202. Although the main responsibility for setting up and financing supervised play facilities will not rest with housing departments, planners and housing managers should nevertheless consider ways in which they can provide accommodation suitable for supervised play purposes. For instance, tenants' halls and old people's clubs may often be suitable for play groups or after-school play activities. At the planning stage of schemes the children's needs for indoor accommodation should not be neglected. On a newly planned housing estate at Granby Street in Bethnal Green the proposed community building has been designed to include not only the more usual tenants' association rooms and old people's club room, but facilities for a pre-school play group as well, without using a great deal of extra space or money.⁶⁵

203. It must be remembered that not all facilities are attractive to all children. A third of the children interviewed about the Warwick Estate Adventure Playground said there were things they disliked about it (paragraph 175). It is interesting to note that when the Handsworth Adventure Playground in Birmingham was run by a woman, many more of the younger children, especially girls, attended. In planning an adventure playground as much thought should be given to the activities likely to attract girls as to those more generally associated with adventure playgrounds – digging, building, lighting fires, etc. – which are most likely to appeal to boys. Climbing was more popular with boys at the Warwick Estate Adventure Playground, whereas arts, crafts and painting attracted a higher percentage of girls.

Holiday play schemes

204. Even in areas without permanent supervision schemes it is possible to provide children with the opportunity for supervised play during the weeks they are not at school. The Emslie Horniman play scheme only operated during the summer school holidays. Holiday schemes involve time and energy long before the holidays begin. Once a temporary site has been found, play materials must be collected together, volunteers or paid playleaders (who sometimes require accommodation in the neighbourhood) recruited, insurance cover arranged, trips organised for the children, and parents in the area notified about the arrangements if

Notting Hill Summer Project

Mothers helped to organise and run this holiday play scheme





the play schemes are going to be used to the full. At the close of the holidays, sites must be cleared and equipment perhaps stored until the next holiday. The organisers also often find that at the close of the scheme they have to cope with disgruntled children who resent 'their' playground being closed and 'their' playleaders with whom they have formed a relationship, leaving the district probably to be replaced the next year by newcomers. The leader of the play scheme at Emslie Horniman wrote after the scheme had finished: 'Towards the end of the scheme there were signs of anxiety in the older children - would we be back next year, would it be the same people? It was strange that even when the first volunteers left after three weeks many kids didn't come in for a week or more, they were so angry'.⁶⁶

205. Despite these problems, children, particularly those in deprived areas, need opportunities for an extended range of play activities which cannot be provided in unsupervised schemes, and to relate to sympathetic adults not associated with the formal setting of schools. These holiday play schemes may be the only way they can have these experiences, at a time when scarce resources prevent greater allocation of funds for permanent schemes.

Community participation

206. There are strong grounds for involving the community in supervision schemes. There has been a recent growth in the number of 'self-help' playgroups and adventure playgrounds. The Pre-School Playgroup Association has, right from its start, placed special emphasis on the involvement of the mother in playgroup activities, and association groups consist of mothers jointly managing and running their groups. Until recently the majority of playgroups has been confined to middle-class areas. In deprived areas self-help groups have often started where there are community development workers. Workers in the Govern-

ment-designated Community Development Project areas have often found that one of the first needs in these areas is for play facilities including playgroups, and they have encouraged parents to make known their needs. A worker with the North Kensington Family Study wrote in 1966: '... during the past 18 months more parents have become involved in the work and have not only found satisfaction in helping to create activities for their children, but also in increasing their skills and understanding of the needs of their own children'.⁶⁷ It is no easy task for these groups of mothers to run and manage their own playgroups, as many of them are lacking in the skills and knowledge of the more articulate Pre-School Playgroup Association members. The American Headstart Programme found that many of the mothers who participated were themselves deprived and needed trained guidance.⁶⁸

207. The task of finding premises, acquiring and maintaining equipment, arranging a rota of mothers to help with the children etc., may produce many unexpected problems, and the difficulty of financing their activities may be overwhelming. Still encouragement needs to be given to these self-help groups and thought given to ways of easing their difficulties if all children in deprived areas are to have the opportunity for pre-school play. The Urban Aid Programme (paragraph 159) is one way in which help can be given although its resources are limited. Social services departments of the local authority who must be consulted about statutory regulations before playgroups can be started should ensure that their requirements can easily be comprehended by such groups of mothers.

208. It is clear that both children and their parents will appreciate and benefit from a variety of supervised play facilities. But without further research it is not possible to say how different types contribute to normal childhood development, nor to what extent such facilities can compensate the deprived child.

Appendices

Appendix I Activity and location coding

Activity coding

Physically active*

(1) *Running or walking* E.g. running, fighting, tag, chase, hide-and-seek, skipping, jumping etc. Walking or wandering, whether purposeful walking to shops etc. or wandering round site with little obvious purpose.

(2) *Ball games* E.g. football, cricket, pig-in-the-middle, ball against wall.

(3) *Wheeled vehicles* E.g. bikes, trikes, go-carts, roller skates and any toys on wheels on which children can ride.

(4) *Playground equipment*

(5) *Other†* Pursuits which do not fit into any of the above categories, e.g. imaginative games, cowboys, cops and robbers.

(16) *Wild areas*

At Warwick a waste building site was included in this category.

(17) *Other areas*

This included the library at Winstanley Road, the public park adjacent to Canada (excluding the play facilities which were included in category 15) and the underground car park at Curnock Street.

Physically inactive*

(6) *Sitting, standing, lying etc.*

(7) *Other†* Pursuits which do not fit into category 6, e.g. imaginative games, playing house, painting, play with toys, jigsaws, card games.

Location coding

(8) *Roads, pavements and garage courts* Pavements immediately adjacent to roads have been classed with the roads on the grounds that children playing on these pavements would be in some danger. Many activities took place on roads and pavements concurrently.

(9) *Paved areas*

(10) *Gardens*

(11) *Access areas* These included access balconies and decks, open areas under buildings, interior corridors, staircases and lift landings.

(12) *Grassed areas*

(13) *'Unorthodox areas'* These included tops of walls and railings, garage roofs, trees etc. (i.e. places where children were not supposed to be).

(14) *Planted areas*

(15) *Play areas* At Warwick this category included the adventure playground.

*Activities were not categorised as 'physically active' or 'physically inactive' for observations on the first three estates – Gloucester Street, Woodhouse and Woodway Lane.

†Originally, these categories were broken down into 'imaginative games', 'own toys', 'unorthodox' and 'other'. However, it became clear that observers could not reliably differentiate between them.

Appendix II Description of observation areas

A Low-rise estates

Gloucester Street, Sheffield

1. This small scheme of 39 houses is an infill site in a slum clearance area about a mile west of Sheffield city centre. Although most of the dwellings are adjacent to roads, tenants have access to a central open grassed space from their garden without going near a road. There are linked paved areas connecting dwellings and roads at the back of the houses all of which have private gardens.

2. There are no play areas. The nearest open space is a public park about a quarter of a mile away which can be reached only by crossing some busy roads; in this park ball games are prohibited on every day except Whit Monday.

Woodhouse Estate, Sheffield

3. Woodhouse Estate, an estate of family houses, forms part of a larger housing development about four miles south-east of Sheffield city centre. At the time of the observations the sloping site, bounded to the north by a brook, was surrounded by a considerable amount of open countryside. The site is trisected by a distributor road, which carries a bus service, and an access road. Only a few of the houses lead directly on to roads, with the majority in terraces at right angles to the road. There is a separate network of pedestrian paths and all the dwellings have private gardens.

4. No play areas are provided.

Woodway Lane, Coventry

5. This estate has two-storey houses (all with private gardens) and a few old people's bungalows. It is three-and-a-half miles north-east of Coventry city centre, bounded on one side by a brook and some rough open space. It has no through roads, and pedestrian paths are sited at the front of the houses away from the roads. All the dwellings back on to roads or culs-de-sac which are directly accessible from the gardens.

6. Six small play areas are provided, all with brick structures or logs. A factor which influenced the form of play areas was the local authority's intention of developing the rough ground to the west of the site as an open space and neighbourhood play area.

Fleury Road, Sheffield

7. The dwellings at Fleury Road are part of the Gleadless Valley Estate on the outskirts of Sheffield. The estate is on a steeply sloping, south-facing hillside overlooking a large wooded open space in the bottom of the valley. By grouping the terraces of dwellings close together, large open spaces have been created which have been mainly grassed and this, together with the open surroundings, gives the estate a semi-rural setting. The estate consists entirely of houses half of which have garages beneath at the front. All the houses have small paved yards at the rear, and about half have private front gardens; most of the others have private balconies. There is one through road and several access roads. Some of the houses open on to roads at the rear and all front on to pedestrian paths.

8. There is one small, unequipped play area.

B Medium-rise estates

St Mary's, Oldham

9. This estate was the first redeveloped site in a slum clearance area. Surrounded by derelict houses and industrial premises, old occupied houses and cleared areas, it is situated close to Oldham's town centre. About a third of the dwellings are houses with private gardens and the rest are deck-access flats. The estate is mainly traffic-segregated with four, short, access culs-de-sac. The houses, where the majority of children live, are at right angles to the road and open both ways on to extensive pedestrian paths and paved areas. There is a high proportion of grassed, common open space.

10. There are seven play areas on the site. Four of these consist of concrete structures; one has swings: another a slide, paddling pool, swings, a fort and play house: the other is a ball-games area. The nearest open space at the northern end of the site is a wild area known as Oldham Edge. The nearest park is more than half a mile away on the other side of three main roads and the town centre.

The Bonamy, London SE1

11. Situated in Southwark in an area characterised by small industrial development, a railway goods yard, a canal, and a few 19th-century terraced houses, The Bonamy Estate is divided into two by the Rotherhithe New Road. Observations were made only on the northern part, which is connected to the remainder of the estate by a footbridge, giving access to a shopping centre, community buildings, and a public house. Apart from a service road at one end, the estate is strictly traffic-segregated, the dwellings running across the site to form a series of paved pedestrian ways and small courtyards. There are grassed and planted areas raised above the level of the walkways and level grassed areas on the periphery of the site. Most of the ground-floor dwellings have private patios and those at the upper levels, large roof terraces.

12. On the half of the estate where observations were made there is one play area consisting of a climbing frame, slide, swings and sand-pit. At the time of the observations the swings were without seats and the sand-pit empty. There are no parks in the area.

Curnock Street, London NW1

13. This estate in the London Borough of Camden, consisting largely of maisonettes in four-storey blocks but with one six-storey block of flats and nine two-storey houses, is in an area of mixed residential and small light-industrial development adjacent to the main shopping centre in Camden High Road. It is entirely traffic-free, but the outer blocks face busy roads on two sides of the estate. The blocks are arranged to form four courtyards, each with extensive paved and planted areas. None of the dwellings have private gardens or balconies but the ground-level dwellings all have a side-screened section of paving which is contiguous with the access-way paving. Seven shops (unlet at the time of the observations) and a public house are incorporated in the scheme.

14. Each courtyard has a play area with swings, conventional static equipment and architectural features. Across a busy road is a large kickabout area and a main road would have to be crossed to reach the nearest park to the estate.

Royal College Street, London NW1

15. Closely surrounded by other flats, two colleges, a school and a hospital, this estate of flats and maisonettes is next door to Curnock Street and also in the London Borough of Camden. It is traffic-segregated apart from a service road which bisects the site between two of the perimeter roads. A long covered pedestrian way runs alongside the service road giving access to shops. A community hall is provided on the site. All dwellings have recessed balconies except those at ground level which have access to shared but enclosed grassed areas. A few have private gardens.

16. There is no special provision for children's play.

Edith Avenue, Washington New Town

17. The site of this estate is bounded by 19th-century terraced housing, a railway and slag heaps, and some more recent new development of two-storey terraced houses. The estate has access culs-de-sac, leaving the central area traffic-free with dwellings forming a series of well-landscaped courtyards linked by pedestrian paths. Some ground-level dwellings have completely private gardens; some have gardens arranged in pairs, each pair being divided only by a path; and some others have only enclosed greens shared between several dwellings. Upper-level dwellings all have balconies and most of them are served by an 8 ft-wide access deck. At the time of the observations there was one shop on the site.

18. There are three ball-games areas, three with sand-pits and paddling pools (empty at the time of observations) and three separate sand-pits. There are no parks close to the estate.

Acorn Place, London SE15

19. This estate of houses, maisonettes and flats is in a largely residential area in Southwark close to the Peckham shopping centre beside the busy A21 road to the Kent coast. There are, however, only two access roads on the estate itself. The dwellings are arranged to form a series of paved courtyards, with planting. The houses have private gardens and some also have private balconies; most of the flats have no private open space. An existing pub, 11 shops, a surgery and three laundries were included in the estate. The only grassed area is a small strip at the southern end of the site.

20. There are three playgrounds on the estate. One of these, a roof over a group of garages, is unequipped and was intended as a kickabout area but it is not enclosed. The other two are equipped with moving and conventional static equipment. One of these is partially under cover. There are no parks close to the estate.

C Mixed-rise estates

Park Hill, Sheffield

21. This estate, a redevelopment of a slum area, is in an area of mixed residential, industrial and commercial uses on a steep hill overlooking Sheffield's town centre and station. The whole estate consists of four to 14-storey deck-access slab blocks, which are linked together at every third floor by the deck systems to form one unit. These 10 ft-wide decks are large enough to take small service vehicles. None of the dwellings has a private garden but all have private balconies. The estate is traffic-segregated and all the blocks face away from the roads. There are large expanses of paved areas and wide stretches of grass in the space between the blocks. Two schools, four pubs, 31 shops, a tenants' meeting hall, a police sub-station and a laundry are included in the site.

22. There are three large playgrounds with sand-pits, climbing frames and concrete structures; a narrow bowling alley, and two

ball-games areas. Although there are no parks nearby, there is an extensive grassy area sloping down from the estate to the main railway station.

Sceaux Gardens, London SE5

23. Part of this estate in Southwark fronts on to the busy Peckham Road, but much of it is separated from roads and located in an old area with some new residential development. It was built on the site of a hospital with well-established gardens, which have since become overgrown. A large central pedestrian precinct is a major feature of the estate. All the bungalows, which are occupied by elderly residents, have small private gardens, but none of the other residents has a private open space except for the narrow fire-escape balconies in the internal corridor blocks. Six shops and a communal laundry are on the site.

24. There is one tubular climbing frame.

Canada Estate, London SE16

25. Situated in the London Borough of Southwark not far from the southern end of the Rotherhithe tunnel, adjacent to the Surrey Docks, Canada Estate is in an old area of mixed residential and industrial use. There is only one through road, mainly used by estate traffic. Much of the open space is paved but there are several large grassed areas. None of the flats in the two 21-storey point blocks has a private balcony but in the cluster blocks ground-floor dwellings have private gardens and those above, private balconies.

26. Three concrete play structures are provided, and the estate is adjacent to a small park with a ball-games area and a play area equipped with moving and conventional static equipment. A short distance away but over a main road is the larger Southwark Park.

Winstanley Road, London SW11

27. Located in the London Borough of Wandsworth, in one of London's inner suburbs, this estate is adjacent to Clapham Junction Station; it was an early stage of a large-scale renewal of a largely residential area. There is only one through road on the estate and it receives little traffic; the remaining road area consists of culs-de-sac. The site is intensively developed and much of it is paved with a variety of materials. There are only a few grassed areas, which are rather inaccessible to children. Some of the ground-floor dwellings have private gardens and the dwellings in the point and internal-corridor slab blocks have private balconies. The remaining residents have no open space. Four shops, a children's library and six workrooms are included in the estate.

28. There are eight play areas dotted about the estate. Three of these are equipped with play sculptures, two with climbing apparatus made of wood, metal and concrete and one with a concrete Wendy house and shops. There is a ball-games area and an area built over parking space, equipped with moving and conventional static equipment. Although there are three parks in the district, none of them is within a mile.

Warwick Estate, London W2

29. This, the largest estate where observations were made, is situated in North Paddington in the City of Westminster, in a slum clearance area bounded to the north by the Grand Union Canal and to the south and south-west by the busy Harrow Road. It is not traffic-segregated and most of the dwellings face on to roads. Some of them have gardens if they are on the ground floor

or balconies if higher up, but others have no private open space. There are several large grassed areas. Three schools, two churches, an old people's home, a fire station, three pubs and 12 shops are included in the site.

30. There are eight small play areas with concrete structures or somersault bars. Away from the main part of the estate is a small extension with three small play areas – one including swings. This section was excluded from the observations because it was separated by the very busy Harrow Road. Observations were made on an adventure playground on the estate which was run by a voluntary organisation with the leaders' salaries financed by the Inner London Education Authority.

D The older area, Oldham

31. The area is adjacent to the St Mary's Estate in Oldham (see paragraphs 9 and 10 of this Appendix). It stretches from Oldham Edge (a large area of rough open ground) in the north to the town centre in the south, and includes derelict waste areas and small-scale industry. It is bisected by one busy main road, but most of the other roads are steep and cobbled, with little and slow-moving traffic. Most of the housing is due to be cleared for redevelopment, and consists of 19th-century terraced dwellings. Few of them have private gardens, but many have small back yards opening on to unkempt alleyways. Some of the slightly larger houses have very small front gardens but most front doors have direct access on to the narrow pavements.

32. There is no specific play provision in this area, but at the time of the observations the Territorial Army hut on Oldham Edge (since demolished) had some simple gymnastic equipment, sometimes used by the children. Also on Oldham Edge is a small playing field prohibited for general use. The nearest park is on the other side of the town centre.

E The Recreation Ground, London W10

33. Emslie Horniman Pleasance is a recreation ground in Kensal Town, in the Royal Borough of Kensington and Chelsea. There is a housing estate to one side of the park and a primary school on the other. To the south lies the main British Railways line out of Paddington.

34. The park, which has a park keeper but no formally supervised facilities, contains an equipped play area. At the time of the observations this contained several swings, a see-saw, two merry-go-rounds and a pendulum see-saw. It was chosen for observations because during the summer of 1969 a supervised play scheme was organised there, so it was possible to carry out three observation surveys, before, during and after the scheme was in operation. The intention was to assess the effectiveness of play supervision in terms of patterns of activity and general use of the facilities and to see how these changed during the period of supervision.

35. During the period of supervision there was an average of 11 to 12 playleaders a day on the site, two or three of whom were qualified playleaders while the remainder were voluntary helpers. A church hall was used when it was raining and a waste area adjacent to the park was utilised. The first observation study was carried out in early July, the second in August and the third in September.

Appendix III Supervised play facilities

1. Local authorities have a wide variety of powers to provide facilities for play. For example Section 53 of the Education Act 1944⁶⁹ enables local education authorities to provide facilities for recreation, including play centres, and powers under Section 22 of the National Health Service Act 1946⁷⁰, Section 65 of the Health Services and Public Health Act 1968⁷¹, Section 46 of the Children's Act 1948⁷², and Section 1 of the Children and Young Persons Act 1963⁷³, enable social services committees to provide suitable day care and play facilities either through their own resources or by giving assistance to voluntary organisations. Powers under the Children and Young Persons Act 1969⁷⁴ enable social services committees to encourage the development of play and leisure time facilities. Under Section 4 of the Physical Training and Recreation Act 1937⁷⁵ local authorities may provide and equip playing fields and buildings for recreational purposes and provide leaders so that effective use may be made of facilities. The use of these powers is, however, for them to decide having regard to other demands on their resources. In Wales, central governmental responsibility is dealt with by the Welsh Office.

A For the under-fives Organisation

2. Responsibility for the under-fives at central government level is divided between the Department of Education and Science and the Department of Health and Social Security apart from Wales where it is dealt with by the Welsh Office. At local government level local education authorities and local authority social services committees share it. The Department of Education and Science and local education authorities are responsible for maintained nursery schools and classes. The Department of Health and Social Security and social services committees of local authorities are responsible for the day care of under-fives and for legislation governing the registration and supervision of child-minders and private nursery groups.

Examples

3. *Nursery schools and nursery classes* Nursery schools and nursery classes attached to primary schools are maintained by local education authorities and are usually staffed by qualified teachers with the help of nursery assistants. The emphasis is on education and a gradual introduction to primary school. Education in these schools and classes is provided free of charge. They cater for children aged three and four, with a handful of two-year-olds. Many nursery schools and classes have part-time sessions, and at present about two-thirds of the children attend full-time and one-third part-time, with a group in the morning and another in the afternoon. Because of the limited provision of nursery education, which is available for about 6% of the combined three and four-year-old age groups, priority is often given to children referred by social workers and doctors, and, in the case of those nursery classes specially established to enable more married women to return to teaching, to their children.

4. *Day nurseries* Day nurseries are provided by local authority social services departments and are staffed mainly by trained nursery nurses. They provide a day care service for children from six weeks to five years-of-age whose mothers are unable to care for them or, because of adverse social conditions, need to go out

to work. They are normally open for 10 or 11 hours on five days a week for 50 or 52 weeks of the year. Charges are assessed on the ability to pay. Standards of care and accommodation, equipment and staffing have been laid down by the Department of Education and Science.

5. *Part-time nursery groups* Some local authority social services departments also run part-time nursery groups for the under-fives from socially deprived backgrounds to provide them with opportunities for imaginative and constructive play, and relief from continuous care by parents where this is thought to be essential to family welfare. The staff have suitable training. Hours of opening vary according to need. Minimum space standards have been recommended by the Department of Education and Science.

6. *Premises registered under the Nurseries and Child-Minders Regulation Act 1948*⁷⁶ Local authority social services departments have a duty under this Act* to register premises in their area where children are received to be looked after for two hours or more. This includes the registration of premises used as private day nurseries, private nursery schools and playgroups. The authorities have power to impose requirements in respect of, quantity and standards of accommodation, equipment, staffing and care, on which the Department of Education and Science has suggested standards to local authorities. The minimum recommended space standards are the same as for local authority premises. The nursery groups are run by individual and private and voluntary organisations and provide for full-day and part-day facilities in a variety of ways:

(a) PRIVATE NURSERY SCHOOLS

Private nursery schools for children under five are *not* the responsibility of the Department of Education and Science, but are registrable under the Nurseries and Child-Minders Regulations. Some offer facilities similar to those in maintained nursery schools and may be staffed by trained teachers. Fees for admission are often high, which inevitably means that they cater mainly for children from a relatively prosperous background.

(b) PRIVATE NURSERIES

Private day nurseries vary in size and purpose. Some are run as small business concerns while others are organised by voluntary bodies and care mainly for socially deprived children. They may provide facilities comparable to those of local authority day nurseries and are usually open for longer hours and for more weeks of the year than private nursery schools; they are, therefore, attended by children of working mothers. Factories, hospitals and other institutions provide day nurseries where they consider there is a need.

(c) PLAYGROUPS

Playgroups cater for children between the ages of two and five and usually meet for two to three hours at a time. Most playgroups provide a service all the year round apart from weekends and public holidays. Some groups open daily.

*As amended by Section 60 of the Health Services and Public Health Act 1968⁷¹

others once or twice a week and children usually attend for a part of the day on two or three days each week. There are some groups specifically for handicapped children. The leaders are suitably qualified or experienced persons. Mothers of children attending the playgroups are often encouraged to help with the supervision of the children and the organisation of the group.

In recent years there has been a rapid expansion in this field. The Pre-School Playgroup Association, The Save the Children Fund, and Priority Area Children, are the most active voluntary organisations, the latter two concentrating in deprived areas. Although to date most effort has been concentrated in middle-class areas, increasingly there has been central and local encouragement for setting up playgroups in deprived areas.

Most of these playgroups are non-profitmaking and are supported by fees paid by parents sufficient to meet the running cost and the provision and maintenance of equipment. Rent for premises is often waived (e.g. in schools) or is nominal. Some groups give free places to needy children and priority class children placed by local authorities may be paid for by the authority.

7. *One o'clock clubs* These clubs, run by the Greater London Council Parks Department, make provision for children under five including babies, and their mothers. Most of the clubs are in parks but some are situated on housing estates.

8. They are operated under Section 4 of the Physical Training and Recreation Act 1937.⁷⁵ Unlike other facilities for the under-fives, governmental responsibility is with the Department of the Environment and not the Department of Education and Science or the Department of Health and Social Security as the children are not separated from their mothers. The aim of the clubs is to make play facilities available for the children and also to provide an environment in which the adults can relax and either sit and chat or involve themselves in the play.

9. They are open on weekdays from 1-4.30 p.m. all the year round. Unlike most playgroups, nursery schools and day nurseries, they have no waiting list and any child under five is welcome to attend provided he is accompanied by an adult. Admission is free and no register of attendance is kept. Each club is staffed by a Senior Playleader who is salaried and at least two assistants who are part-time sessional workers. The staff, who are all women, are trained by the Greater London Council's in-service training scheme and are all supported by an Area Supervisor who visits them twice a week.

10. Each club has indoor accommodation and facilities for painting, play with clay, and a book corner. Outside facilities include a sand-pit and playground equipment. Some clubs keep small pets for the children to learn to look after.

B Supervised facilities for the over-fives Organisation

11. Responsibility for the provision of supervised play facilities for children of school age is divided between the Department of the Environment, the Department of Education and Science and the Department of Health and Social Security except for Wales where it is dealt with by the Welsh Office. At local authority level responsibility is split further. Supervised facilities may be administered by housing, education, parks, recreation or social services departments or even the engineer's or surveyor's departments. Local authorities are not required to provide supervised play facilities out of school hours (as they are for the under-fives)

although a number of Acts give them power to provide or grant aid for such facilities. There is therefore no uniform distribution of these facilities throughout the country, nor are those that do exist necessarily in areas of special social need.

12. Supervised facilities for over-fives are diverse in character. Some of them are provided and financed by local authorities, others are run by voluntary organisations or self-help groups.

Examples

13. *Play parks* Play parks were first pioneered in Scandinavia and later in the USA and Canada. In this country the Greater London Council was the first authority to open such parks which are areas of between one and two acres in a park setting.

14. They are open for any child of school age. In the past most of them opened at Easter and closed in September but now, wherever possible, they are kept open throughout the year so that the continuity in the relationship between staff and children is not broken. They operate from 5.30 p.m. to 8.00 p.m. in term time and 9.30 a.m. to 6.00 p.m. or 8.00 p.m. during holiday time. On Saturdays and Sundays they open from 1.30 p.m. to 6.00 p.m. Each park is staffed by a senior playleader and two or three assistants trained by the Greater London Council.

15. Each play park is developed individually according to the nature of the site and the personality of the senior playleader. Children are free to climb, dig (where possible) and build tree-houses etc. There are opportunities for a variety of creative activities; painting, drawing, modelling, collage work, spontaneous plays etc. Each play park has a hut for use in wet weather and often they are situated adjacent to the usual park playground where children can play with other play equipment. Parent participation is not encouraged.

16. *Play centres and junior clubs* In some areas education authorities provide supervised facilities for play after school hours and during school holidays. In London, centres are usually open for two to two-and-a-half hours after school and all day during the weekdays and school holidays. Junior clubs cater for children of secondary school age meeting two or three evenings a week at a later hour than the play centres. The centres and clubs use school facilities. In centres, emphasis is on group play and play with equipment such as Wendy houses, puzzles and board games with opportunities also for team games. Junior clubs offer a wide range of activities, such as table tennis, ballroom and modern dancing, and opportunities for social service. Many clubs encourage the participants to help in the running of the clubs by forming a committee under the guidance of the leader.

17. *Adventure playgrounds* Adventure playgrounds originated in Denmark in 1943. They are supervised playgrounds and aim to provide an environment where children have freedom to experiment with a wide range of materials and activities. The playground contains tools, building materials, including scrap metals, rope, nails, and children are encouraged to build dens from scrap, dig holes and light fires. Every playground has a hut for wet weather activity, arts and crafts, domestic activities, table games play acting etc. Some of them have gardens and others keep pets which the children look after and care for themselves.

18. Adventure playgrounds are open free of charge to all children in the neighbourhood and many others have special play areas for under-fives. Some of them have playgroups using the premises during the day and open for three to four hours after school for older children and all day Saturday and school holidays, merely closing for lunch and tea breaks.

19. One or two local authorities instigate and finance completely the running of such playgrounds. However, the majority of adventure playgrounds in this country are the result of interested people coming together and forming an autonomous committee which has then made efforts to raise money from a variety of sources to enable them to start a playground. Once started, some of them receive grants from their local authorities for the leaders' salaries. Increasingly parents and others from the immediate neighbourhood are forming self-help groups to instigate and run playgrounds. Some of these groups have been helped by grants from the Urban Aid Programme.⁴⁶ Parents are therefore not excluded from adventure playgrounds. The playgrounds usually have close ties with the neighbourhood and the older children may become involved in community service, chopping firewood and decorating for elderly people, etc. Some of them have youth clubs in the evening for older children and some playgrounds organise outings, camping weekends and trips abroad.

20. *Voluntary clubs* There is a whole host of voluntary clubs, sometimes given assistance by local authorities but often run entirely on a voluntary basis. Perhaps the most popular of these is the Scout and Guide Movement which has sections in almost every town and village in the country. Youth clubs, boys clubs and specialist hobbies clubs fill out the range of supervised 'play facilities' available to children of all ages. The main difference between these organisations and other supervised facilities mentioned is that often they only operate on one evening a week and many only cater for a group of one sex and often adhere to a code of rules lacking in the freer atmosphere of play parks and adventure playgrounds.

21. *Holiday play schemes* Certain local authorities and voluntary organisations attempt to provide supervised facilities during the school holidays to make up for the lack of these facilities in their districts all the year round. These may utilise school buildings or waste areas awaiting redevelopment. Some local authorities have agreed to create play streets for the duration of the school holidays and this has been particularly beneficial in areas generally lacking in open space.

References

- 1 FLETCHER S S F *Froebel's chief writings on education* Edward Arnold 1912 p 50
- 2 GIDDENS A Notes on the concepts of play and leisure *Sociological Review* Vol 12 March 1964 pp 73-89
- 3 HOLME Anthea and MASSIE P *Children's play: a study of needs and opportunities* Michael Joseph 1970
- 4 McLELLAN J *The question of play* Pergamon 1970
- 5 MILLER S *The psychology of play* Penguin 1968
- 6 PIAGET J *Play dreams and imitation in childhood* Heinemann 1951
- 7 BUILDING RESEARCH STATION National Building Studies Research Paper 39 *Children's play on housing estates* (Vere Hole) HMSO 1966
- 8 BUILDING RESEARCH STATION Design Series 46 *Children's play on housing estates: a summary of two BRS studies* (Vere Hole and A Miller) The Station 1966
- 9 DEPARTMENT OF THE ENVIRONMENT Circular 79/72 (Welsh Office 165/72) *Children's playspace* HMSO 1972
- 10 DANISH NATIONAL INSTITUTE OF BUILDING RESEARCH *Children's use of recreational areas* (Jeanne Morville) Copenhagen: The Institute 1969 In Danish
- 11 WOHLIN H *Outdoor play and playspaces* Stockholm 1961 In Swedish
- 12 JEPHCOTT *Pearl Homes in high flats* Oliver and Boyd 1971 p 55
- 13 DEPARTMENT OF THE ENVIRONMENT *Quality monitoring: a pilot survey of the quality and performance of local authority housing in England and Wales* To be published
- 14 DEPARTMENT OF THE ENVIRONMENT Design Bulletin 25 *The estate outside the dwelling: reactions of residents to aspects of housing layout* HMSO 1972
- 15 DEPARTMENT OF THE ENVIRONMENT Design Bulletin 22 *New housing in a cleared area: a study of St Mary's Oldham* HMSO 1971
- 16 DEPARTMENT OF THE ENVIRONMENT *Medium-rise high-density housing* To be published
- 17 MUSSEN P H and others *Child development and personality* New York: Harper and Row 1963
- 18 NEWSOM J and NEWSOM Elizabeth *Four years old in an urban community* Allen and Unwin 1968
- 19 ACKERMANS E *The vicinity of the home used as a play area* Netherlands Institute for Preventive Medicine 1970 In Dutch with an English summary
- 20 OFFICE OF POPULATION CENSUSES AND SURVEYS Social Survey Division *Children and road safety: a survey amongst mothers* (Judy Sadler) HMSO 1972 p 76
- 21 SANDELS S *Small children in traffic* Stockholm 1969 In Swedish
- 22 EDINBURGH UNIVERSITY Architecture Research Unit *Aspects of traffic separated housing layouts: Stevenage Stevenage Development Corporation* 1970
- 23 BUILDING RESEARCH STATION Current Paper 39/68 *The location of primary schools* (P H Levin and A J Bruce) The Station 1968
- 24 MINISTRY OF HOUSING AND LOCAL GOVERNMENT *Homes for today and tomorrow* (Parker Morris Report) HMSO 1961
- 25 MINISTRY OF HOUSING AND LOCAL GOVERNMENT Circular 36/67 *Housing standards costs and subsidies* HMSO 1967 p 14 para. F
- 26 BRITISH STANDARDS INSTITUTION BS 3178: Part 1: 1959 *Playground equipment for parks: general requirements*
- 27 LADY ALLEN OF HURTWOOD *New playgrounds* Housing Centre Trust 1964 p 27
- 28 DEPARTMENT OF THE ENVIRONMENT *Housing procedures manual* 1972 To be published
- 29 BENGTSSON A *Environmental planning for children's play* Crosby Lockwood 1970 p 59
- 30 LIVERPOOL UNIVERSITY *Low cost grassing of sites awaiting redevelopment* (A D Bradshaw) 1970 Unpublished
- 31 DEPARTMENT OF THE ENVIRONMENT *Fair deal for housing* Cmnd 4728 HMSO 1971
- 32 PLANT J W and ROBINSON L K *Programme for derelict land reclamation* Stoke-on-Trent City Council 1970 Unpublished
- 33 HILTON K J *The lower Swansea valley project* Longman 1967
- 34 LEE VALLEY REGIONAL PARK AUTHORITY *Lee Valley regional park* The Authority 1969
- 35 Current Work No 2 Camp Hill, Nuneaton *Journal of the Institute of Landscape Architects* February 1967 pp 8-11
- 36 TOWN AND COUNTRY PLANNING ACT 1971 c 78 section 212 HMSO 1971
- 37 ROAD TRAFFIC REGULATION ACT 1967 c 76 HMSO 1967
- 38 TRANSPORT ACT 1968 c 73 HMSO 1968
- 39 DEPARTMENT OF THE ENVIRONMENT *Area Improvement Note 3 Improving the environment* HMSO 1971
- 40 DEPARTMENT OF EDUCATION AND SCIENCE Circular 2/70 *The chance to share* The Department 1970
- 41 DEPARTMENT OF EDUCATION AND SCIENCE Architects and Building Branch Design Note 5 *The school and the community* The Department 1970
- 42 GREATER LONDON COUNCIL *Surveys of the use of open spaces* Vol 1 The Council 1968
- 43 LADY ALLEN OF HURTWOOD *Planning for play* Thames and Hudson 1968 p 92
- 44 STEVENAGE DEVELOPMENT CORPORATION Social Relations Department *Survey of children's play 1968/1969* First report Unpublished
- 45 HOUSING ACT 1969 c 33 HMSO 1969
- 46 HOME OFFICE Circulars 225/68, 34/69, 117/70, 51/71 (Welsh Office 29/71), 161/71 (Welsh Office 128/71), 247/71 (Welsh Office 235/71), 91/72 (Welsh Office 98/72)
- 47 LOCAL GOVERNMENT GRANTS (SOCIAL NEED) ACT 1969 c 2 HMSO 1969
- 48 LEISSNER A and others *Advice guidance and assistance: a study of seven family advice centres* Longman 1971
- 49 OPIE Iona and OPIE P *Lore and language of school children* Oxford University Press 1959
- 50 HIMMELWEIT H T and others *Television and the child* Oxford University Press 1958
- 51 BLOOM B S *Stability and change in human characteristics* J Wiley 1964
- 52 PRINGLE Mia Kellmer *Policy implications of child development studies* *Concern* November 1969 pp 40-48
- 53 PRINGLE Mia Kellmer *Deprivation and education* 2nd ed. Longman 1971
- 54 CRELLIN E. and others *Born illegitimate* NFER 1971

55 DEPARTMENT OF EDUCATION AND SCIENCE *Children and their primary schools* (Plowden Report) HMSO 1967 Vol 1 para. 55

56 BERNSTEIN B *Social class and linguistic development in education economy and society* New York Free Press 1961

57 PRINGLE Mia Kellmer and others *11,000 seven-year-olds* Longman 1966

58 DAVIE R and others *From birth to seven* Longman 1972

59 BERNSTEIN B and YOUNG D Social class differences in conceptions of the uses of toys *Sociology* Vol 1 May 1967 pp 131-140

60 ASSOCIATION OF MULTI-RACIAL PLAYGROUPS *Occasional Papers 1-4* The Association (Now known as Priority Area Children)

61 HOME OFFICE *Criminal statistics England and Wales Table A Criminal offences known to the police* Annually HMSO

62 TORONTO PSYCHIATRIC HOSPITAL Forensic Clinic *The forensic clinic study* (J W Mohr) Unpublished

63 BURTON L *Vulnerable children three studies of children in conflict: accident involved children, sexually assaulted children and children with asthma* Routledge and Kegan Paul 1968

64 HERBERT J *Bandley Hill Children's Play Association Stevenage* The Association 1967 Unpublished

65 DEPARTMENT OF THE ENVIRONMENT *High density housing project at Granby Street, Bethnal Green for the Greater London Council: proposals for the community building* 1971 Unpublished

66 NOTTING HILL SOCIAL COUNCIL An unpublished Report

67 NORTH KENSINGTON FAMILY STUDY COMMITTEE *Play for the under fives* The Committee 1966

68 GORDON Ira J *Parent involvement in compensatory education* University of Illinois Press 1970 Chap III

69 EDUCATION ACT 1944 c 31 Section 53 HMSO 1944

70 NATIONAL HEALTH SERVICE ACT 1946 c 81 HMSO 1946

71 HEALTH SERVICES AND PUBLIC HEALTH ACT 1968 HMSO 1968

72 CHILDREN'S ACT 1948 c 43 Section 46 HMSO 1948

73 CHILDREN AND YOUNG PERSONS ACT 1963 c 37 Section 1 HMSO 1963

74 CHILDREN AND YOUNG PERSONS ACT 1969 c 54 HMSO 1969

75 PHYSICAL TRAINING AND RECREATION ACT 1937 c 46 Section 4 HMSO 1937

76 NURSERIES AND CHILD-MINDERS REGULATION ACT 1948 c 53 HMSO 1948

Design Bulletins

Department of the Environment

Design Bulletins give information and advice on current housing problems. Some provide data on specific aspects, others describe the results of development projects. All are illustrated and some contain a specially selected bibliography. The numbers and titles of bulletins currently available are given below together with a brief note on their contents.

As from November 1970, the Department of the Environment assumed the previous functions of the Ministry of Housing and Local Government in relation to these publications.

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1 SOME ASPECTS OF DESIGNING FOR OLD PEOPLE: (metric edition) 1968 reprinted 1969, 15p

Primarily written for those concerned with the detailed design of accommodation for old people. This edition gives rounded metric equivalents for the original imperial dimensions and incorporates the results of more recent anthropometric studies.

2 GROUPED FLATLETS FOR OLD PEOPLE: *a sociological study.* (metric edition) 1968, 37½p

Report of a survey undertaken to provide background sociological material for a flatlets project at Stevenage described in Bulletin 11. This edition gives rounded metric equivalents for the original imperial dimensions and incorporates figures from the 1961 Census in Table 1 of the Appendix.

3 SERVICE CORES IN HIGH FLATS

A series of bulletins dealing with engineering services in blocks of ten or more storeys:

Part 1 *Sanitary Plumbing* 1962, out of print

2 *The selection and planning of passenger lifts* 1962 reprinted 1967, out of print

3 *Mechanical ventilation of inner rooms* 1963, out of print

4/5 *GPO telephone/Aerial installations* 1964, out of print

6 *Cold water services* 1965, out of print

7 *Protection against lightning* 1967, 12½p

4 SWIMMING POOLS 1962 reprinted 1964, 1967, 1969, out of print
A guide outlining design requirements and technical data. (See also Bulletin 9.)

5 LANDSCAPING FOR FLATS third edition 1967, reprinted 1969, 75p

A guide to the treatment of ground space in high-density housing estates.

6 SPACE IN THE HOME: (metric edition) 1968 reprinted 1970, 1972, 40p

Illustrates space and furniture requirements for different activities in the home.

7 HOUSING COST YARDSTICK: *for schemes at medium and high densities.* 1963, out of print

The original cost yardstick publication. The yardstick in this bulletin is now superseded, but the background information still holds good. Cost yardstick information is now given in DOE Circulars obtainable from HMSO.

8 DIMENSIONS AND COMPONENTS FOR HOUSING: *with special reference to industrialised building.* 1963, out of print

Recommends preferred dimensions for housing with special reference to industrialised building. This bulletin will remain valid for buildings in foot-inch dimensions. (See also Bulletin 16.)

9 SWIMMING BATH COSTS: *with some notes on design.* 1965, 7½p

This bulletin, together with Bulletin 4, gives data for the design of either covered or open air baths.

10 CARS IN HOUSING 1: *some medium density layouts.* 1966 reprinted 1967, 80p

Describes alternative ways of achieving vehicular/pedestrian separation and illustrates typical medium density layouts. (See also Bulletin 12.)

11 OLD PEOPLE'S FLATLETS AT STEVENAGE: *an account of the project with an appraisal.* 1966, 40p

The first bulletin dealing with a development project designed by the Ministry's Research and Development Group. It contains an illustrated account of the design and constructional aspects and gives an appraisal of the scheme in use. (See also Bulletins 1 and 2.)

12 CARS IN HOUSING 2: *I Dimensions: II Multi-storey parking garages:* (metric edition) 1971, 30p

Gives detailed design data for the parking and garaging of cars in residential areas. The first section gives data for cars, garages, forecourts and parking bays. The second section is devoted to multi-storey garages for housing estates. (See also Bulletin 10.)

13 SAFETY IN THE HOME: (metric edition) 1971, 30p

Describes safety requirements for both house planning and detailed design. The material is separately grouped under activities and elements and a check list is given. It does not deal with means of escape from fire. In this edition values are given in S.I. units, amendments made to meet requirements of new legislation and recent research findings incorporated.

14 HOUSE PLANNING: *a guide to user needs with a check list.* 1968 reprinted 1968, 42½p

For use in the preparation of house plans, and also of value to all concerned in the preparation of the design brief, i.e. private developers, housing managers and housing committees.

15 FAMILY HOUSES AT WEST HAM: *an account of the project with an appraisal.* 1969, £1.00

Contains an illustrated account of the development and appraisal of a project undertaken to gain practical experience in applying the recommendations of the Parker Morris Report. The project was designed by the Ministry's Research and Development Group.

16 CO-ORDINATION OF COMPONENTS IN HOUSING: *Metric dimensional framework*. 1968 reprinted 1969, 1970, 30p

This bulletin is one of a series on dimensions and components for housing. Written in metric terms, it discusses the objectives of dimensional co-ordination and describes the metric dimensional framework with the help of diagrams and tables. The application of the framework to a range of plan types is also demonstrated.

17 THE FAMILY AT HOME: *a study of households in Sheffield*. 1970, 37½p

The first of two bulletins dealing with a development project at Sheffield designed by the Ministry's Research and Development Group. It reports on the preliminary social study, summarises the data collected, and sets out the implications for the design brief. (See also Bulletin 18.)

18 DESIGNING A LOW-RISE HOUSING SYSTEM:

—*the 5M system and its development*

—*the pilot project at Sheffield*. 1970, 50p

The second of two bulletins dealing with a development project at Sheffield designed by the Ministry's Research and Development Group. Sets out the purpose of the project, the evolution of the design, the development of the 5M industrialised building system, and the cost planning techniques adopted. (See also Bulletin 17.)

19 LIVING IN A SLUM: *a study of St Mary's, Oldham*. 1970, 35p

The first bulletin in a series dealing with a development project at Oldham designed by the Ministry's Research and Development Group. Gives an account of the preliminary study in the investigation of the social problems involved in the redevelopment of a slum area. (See also Bulletins 20, 21 and 22.)

20 MOVING OUT OF A SLUM: *a study of people moving from St Mary's, Oldham*. 1970, 50p

Moving out of a slum is an account of a study which explores the experiences and attitudes of households displaced during the redevelopment of a slum area. It is the second in a series of four Design Bulletins dealing with a housing project design for Oldham Corporation by the Ministry's Research and Development Group. (See also Bulletins 19, 21 and 22.)

21 FAMILIES LIVING AT HIGH DENSITY: *a study of estates in Leeds, Liverpool and London*. 1970, 60p

The third bulletin in a series of four dealing with a development project at Oldham by the Ministry's Research and Development Group.

It is the last of three pre-design social studies and gives an account of the attitudes of families with children under 16 living on three estates at densities of 109, 130 and 140 persons per acre. (See also Bulletins 19, 20 and 22.)

22 NEW HOUSING IN A CLEARED AREA: *a study of St Mary's, Oldham*. 1971, 65p

The final bulletin in a series of four dealing with a development project at Oldham by the Department's Housing Development Directorate. Gives an account of tenants' views of their new homes and estate, and includes information on design considerations to help assess the views expressed. (See also Bulletins 19, 20 and 21.)

23 HOUSING SINGLE PEOPLE 1: *How they live at present*. 1971, 60p

The first bulletin in a series dealing with a housing project, for single people under retirement age, at Leicester by the Department's Housing Development Directorate. The study is devoted to an account of the social survey work undertaken to find out the groups concerned, their housing needs and demands.

24 SPACES IN THE HOME

A series of bulletins giving guidance on planning and layout of certain spaces in the home:

Part 1 *Bathrooms and w.cs.* 1972, 35p

Gives guidance on planning a layout by describing a means of co-ordinating the activity areas and discussing the basic elements concerned in the internal environment. Cost indices for representative three-appliance bathroom types support the recommendations given.

Part 2 *Kitchens and laundering spaces*. 1972, £1.05

A three-part compendium of information for the designer. Gives guidance on user requirements, design principles, layout, fitments and appliances. Discusses laundering separately so that it can be considered independently of the kitchen. Reviews recent sociological data including illustrated case studies.

25 THE ESTATE OUTSIDE THE DWELLING: *reactions of residents to aspects of housing layout*. 1972, £1.75

The first in a series of bulletins dealing with specific areas and problems encountered in the design of housing layouts. It reports the results of a comparative survey indicating how different types of households reacted to the various types of building form and other aspects of their estate.

26 NEW HOUSING AND ROAD TRAFFIC NOISE: *a design guide for architects*. 1972, 25p

Deals with the serious and widespread environmental nuisance of the effects of noise from heavy flows of traffic. Sets down a standard; describes methods of predicting noise levels; and the measures – with their cost – by which the nuisance may be reduced.



Estate characteristics (taken from Figure 1)

Estate	Bedspaces per acre	Building forms
<i>Low rise</i>		
GLOUCESTER STREET, Sheffield	80	27 2-storey houses, 12 patio houses
WOODHOUSE, Sheffield	70	2-storey houses
WOODWAY LANE, Coventry	75	2-storey houses, old people's bungalows
FLEURY ROAD, Sheffield	51	2-storey houses
<i>Medium rise</i>		
ST MARY'S, Oldham	110	182 2-storey houses, 3,4 and 5-storey deck-access blocks
THE BONAMY, Southwark, London	173	3 and 4-storey balcony and deck-access blocks (39% flats, 61% maisonettes)
CURNOCK STREET, Camden, London	161	4-storey balcony-access blocks - maisonettes, 1 6-storey block - flats. 9 3-storey houses
ROYAL COLLEGE STREET, Camden, London	145	4 and 5-storey balcony-access blocks
EDITH AVENUE, Washington, Durham	135	3, 4 and 5-storey deck-access blocks (50% flats, 50% maisonettes)
ACORN PLACE, Southwark, London	136	7-storey balcony-access block, 2 and 3-storey houses, staircase-access flats at second floor level over maisonettes
<i>Mixed rise</i>		
PARK HILL, Sheffield	200	4 to 14-storey linked deck-access blocks
SCEAUX GARDENS, Southwark, London	136	2 16-storey internal corridor slab blocks - maisonettes, 6-storey balcony-access slab blocks - flats and maisonettes, terraces of bungalows
CANADA, Southwark, London	161	2 21-storey point blocks, 5 3 and 4-storey balcony-access cluster blocks, flats and maisonettes
WINSTANLEY ROAD, Wandsworth, London	154	1 22-storey internal corridor slab block, 3 11-storey point blocks, 4 and 5-storey linked balcony-access slab blocks
WARWICK, Westminster, London	137	21 and 22-storey tower blocks, 3, 4 and 5-storey maisonettes blocks, renovated Victorian terrace houses

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